

October 1, 1988

Dear Apple Certified Developer,

As a new Apple Certified Developer, you may have questions about Apple and how you can take advantage of the programs that are available to you. Enclosed you will find *The Information Exchange*, an information service created to help address your needs for accurate and timely information about Apple's company direction and developer opportunities.

This service is intended to:

- Provide you with pertinent information to help you develop strategic plans for your Apple compatible products
- Set up opportunities for you to communicate product and promotional information to some of Apple's customers

The Information Exchange is a collection of program descriptions, tip sheets, Apple event schedules, key Apple contacts, and other useful information. If you haven't received it yet, you will soon be receiving the HyperCard® version of *The Information Exchange* shortly. It contains the same information you have in this binder.

The Information Exchange was introduced in February 1987 and is updated quarterly. The information in this binder includes some of the original information as well as each of the updates that have been sent since its introduction. You will continue to receive updated information; thus, the binder and the stacks will become an increasingly useful resource.

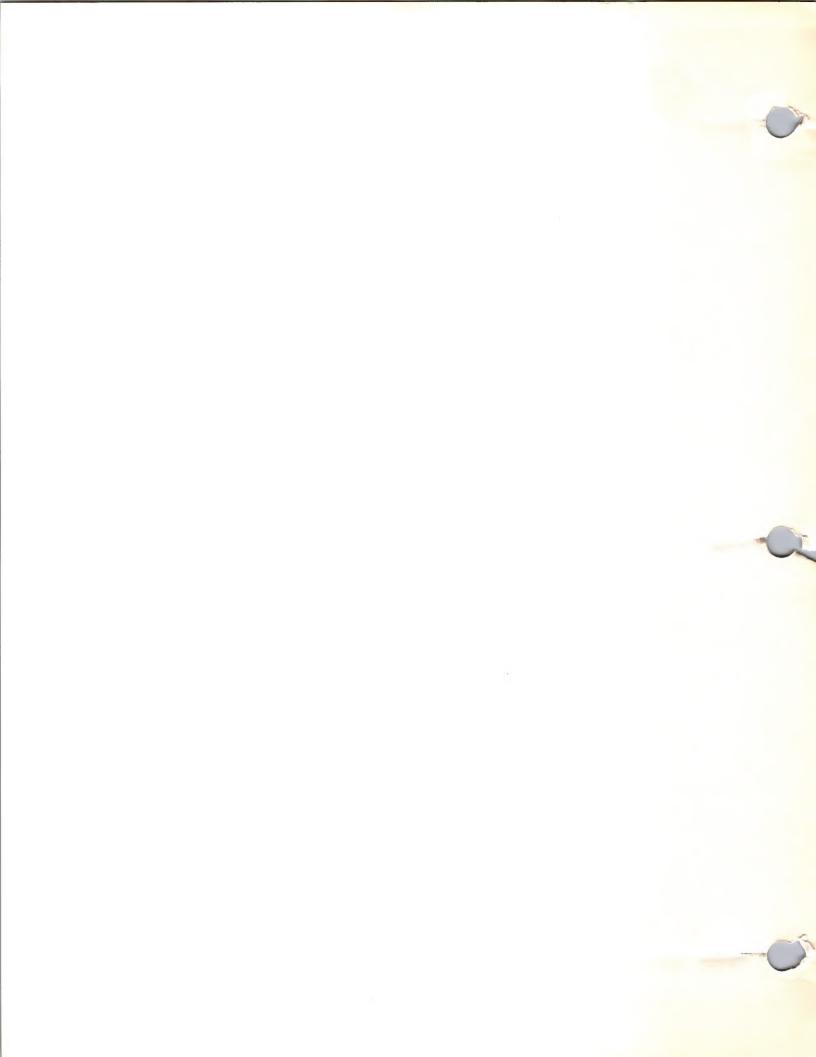
I'm looking forward to working with you to make this service a success. Let's keep the exchange of information flowing between you and Developer Programs!

Welcome aboard,

Peg Bailey Program Manager,

The Information Exchange





CONTENTS

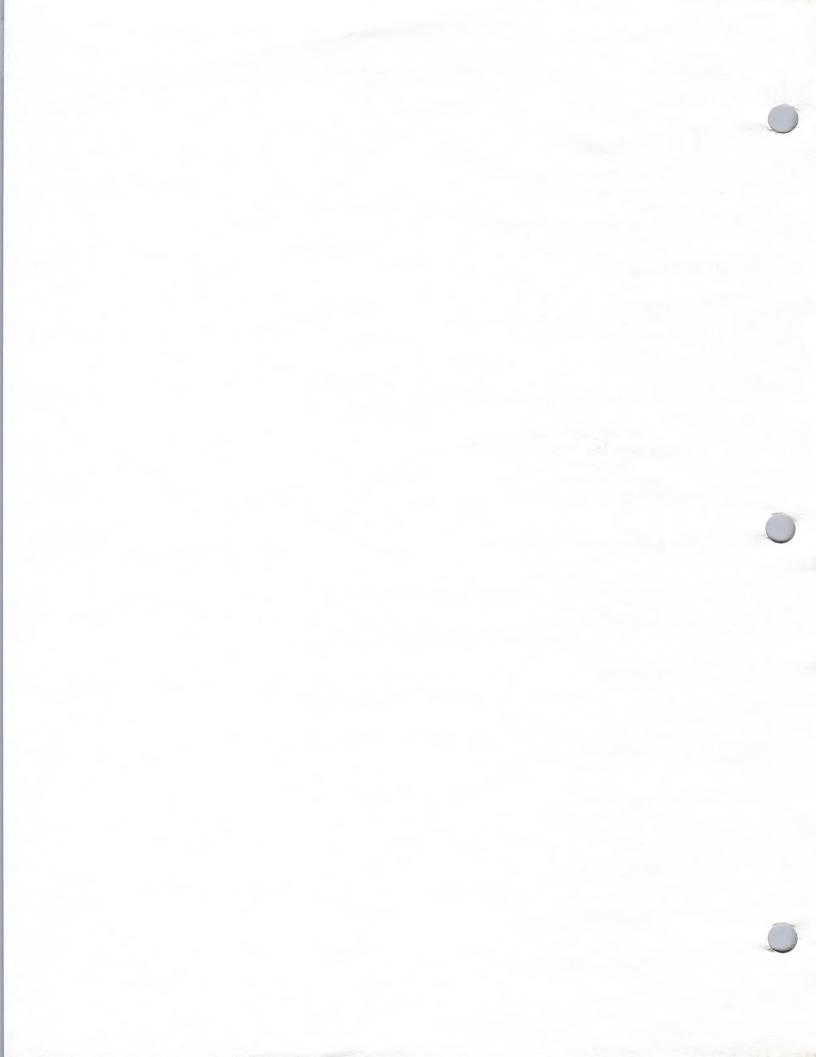
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MARKETING AND SALES INFORMATION

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Resource Center User Groups

TRADE SHOWS AND EVENTS

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User Group Newsletter
DTP Media List
Engineering Media List
Higher Education Media List
Legal Media List
Music Media List
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Publication Tips

PUBLIC RELATIONS

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MARKET RESEARCH

Market Research Resources K-12 Market Research Legal Market Encyclopedia of Associations Home Market Research Business Market Research Higher Ed Market Research User Group Profile



DISTRIBUTION

APDA
Distributor List
Kinko's ACE
Languages and Tools
Wheels for the Mind

PRODUCT DESIGN AND SUPPORT

AppleTalk Development AppleCD SC Development Apple/Digital Connectivity A/UX Development Integrated Applications HyperCard Development HyperCard Resources Legal Market Applications **Business Development** Small Business/Accounting Home Market Development Higher Ed Development K-12 Development AppleShare Development Macintosh Development Apple Development Tools Music Market Macintosh Packaging Tips Apple Bug Report

LEGAL GUIDELINES

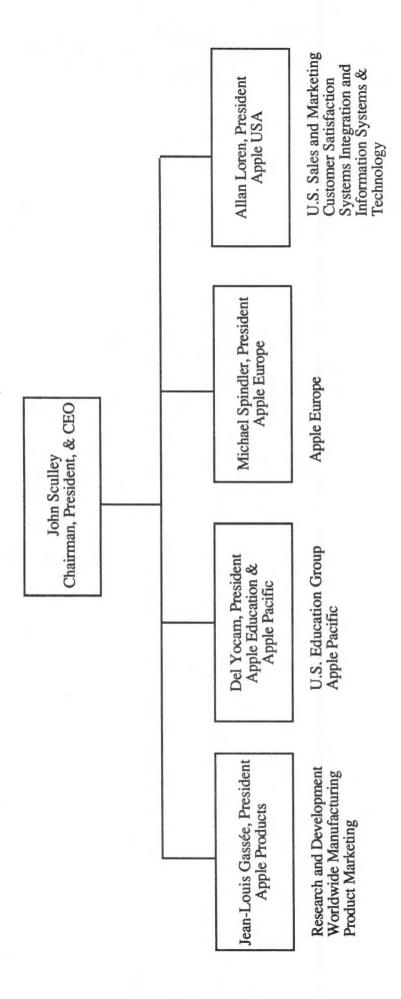
HyperCard Licensing Guidelines Legal Information HyperCard Trademarks Software Licensing Program

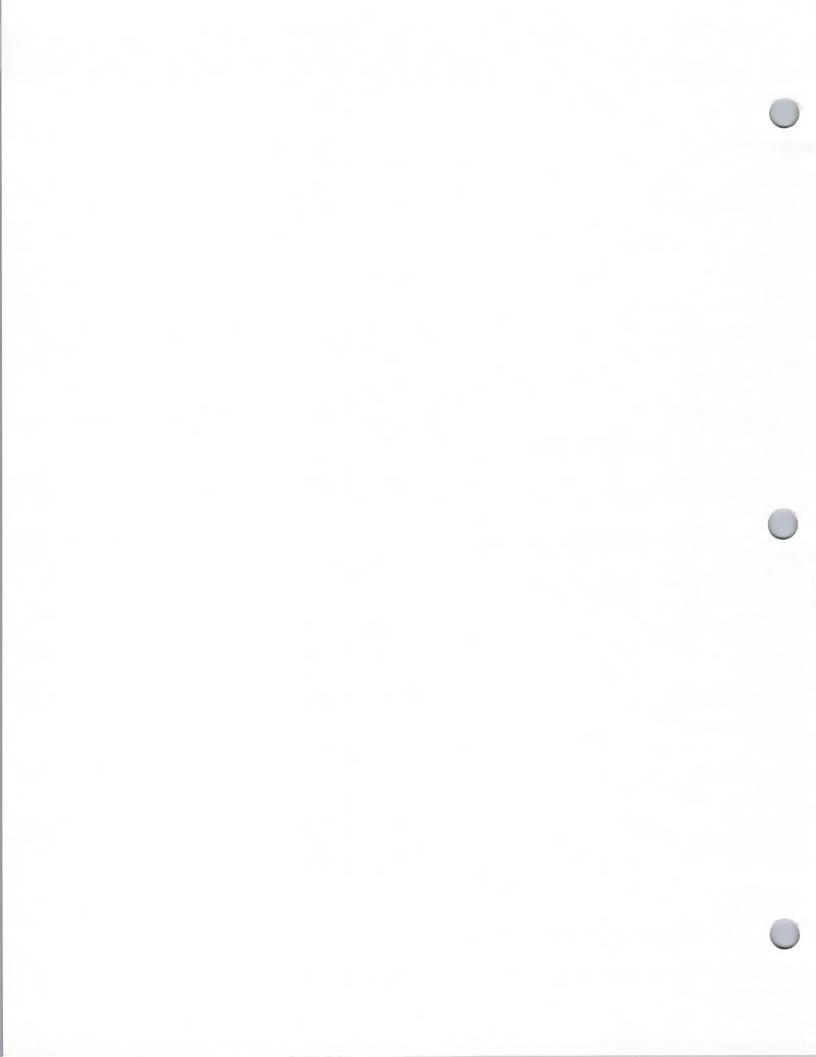
GENERAL INFORMATION

Developer Purchase Program
DeveloperEd Training
ACOT
AppleLink Program
Apple Community Affairs
Strategic Investment Group
MCI Mail
It Shipped! Program
Software Publishers Association
Macintosh Vendors' Association



APPLE COMPUTER ORGANIZATION







Organizational Overview

Apple Contacts

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Most of your contact with Apple will be with two departments: Developer Services and Third Party Marketing. Here is an explanation of what each department does and how you can use them most efficiently.

- **Developer Services** is under the direction of David Szetela and resides in the Research and Development organization.
- Third Party Marketing is managed by Barbara Andersen and resides in the Marketing Programs organization.

Developer Services

Developer Services is responsible for addressing your key development needs for information on Apple's product and technical direction; technical support; technical training and developer conferences. Four groups make up the Developer Services department:

- Developer Programs
- Developer Technical Support
- Developer Events
- Developer Training

For more detailed information about these groups, refer to Developer Services Organization and Functions in this section.

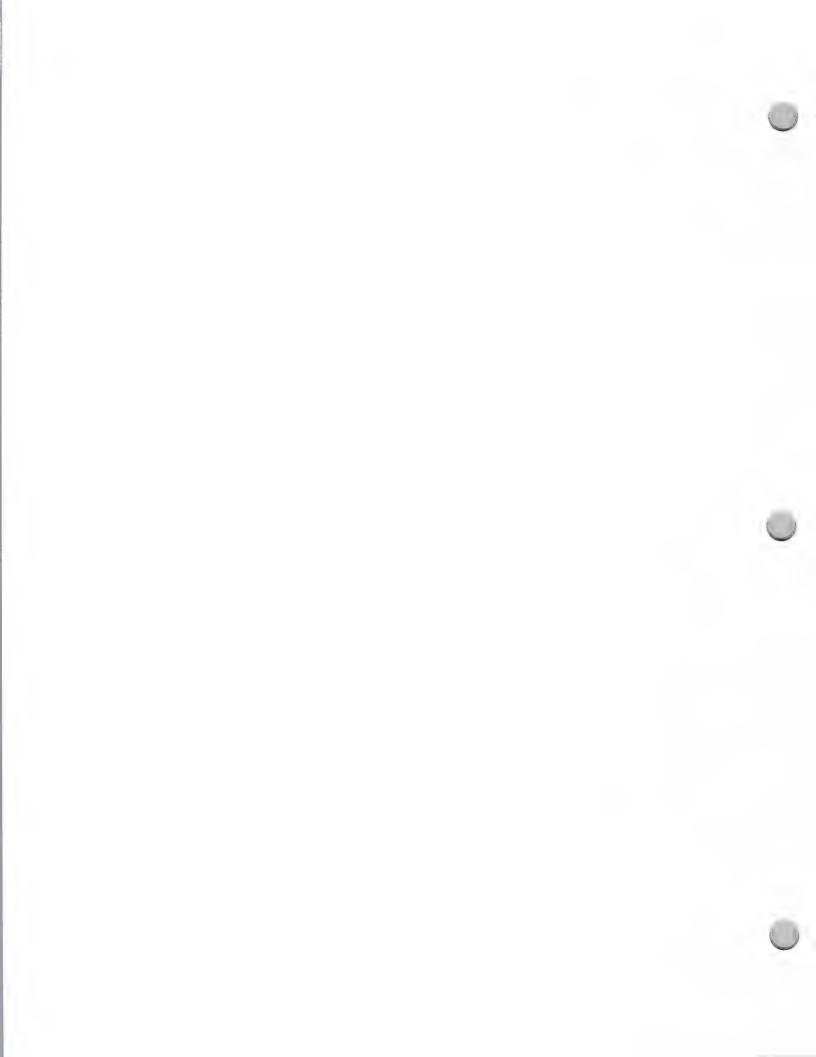
Third Party Marketing

The Third Party Marketing group provides you, the developer, with joint marketing opportunities through a variety of program offerings. In addition, they support Apple's Marketing Groups in the selection of third party software and peripheral products for inclusion in Apple marketing and sales activities. Several groups make up the Third Party Marketing Department:

- Market Programs
- Third Party Programs
- · Third Party Services
- Third Party Guides/Directories
- Third Party Shows/Events

If you are currently shipping your product, and interested in participating in Apple's joint marketing programs, Third Party Marketing Programs is the department you should contact. See Third Party Mktg. Focus in the Marketing and Sales Information section for more information.

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DEVELOPER SERVICES ORGANIZATION AND FUNCTIONS

October 1, 1988

DAVID SZETELA Developer Services

> LINDA GLISH Developer Programs

Provides the following programs and services:

- General developer support
- Product Information Service
- Developer Hotline
- · The Information Exchange
- Developer AppleLink
- Apple Certified Dev. Program
- Developer Purchase Program
- Direct Mail Services
- · New Product and Compatibility Guides
- Appledirect /Apple viewpoints Newsletter
- "It Shipped!" Program

PHIL WILLIAMS
Developer Technical
Support

RENEE RODRIGUE
Developer Events

Provides the following Apple II and Macintosh technical support:

- Answer development questions via electronic mail
- Write and edit
 Technical Notes
- Write example code
- Support seeded products
- Register creators/file types
- Report and validate system software and Apple development system bugs

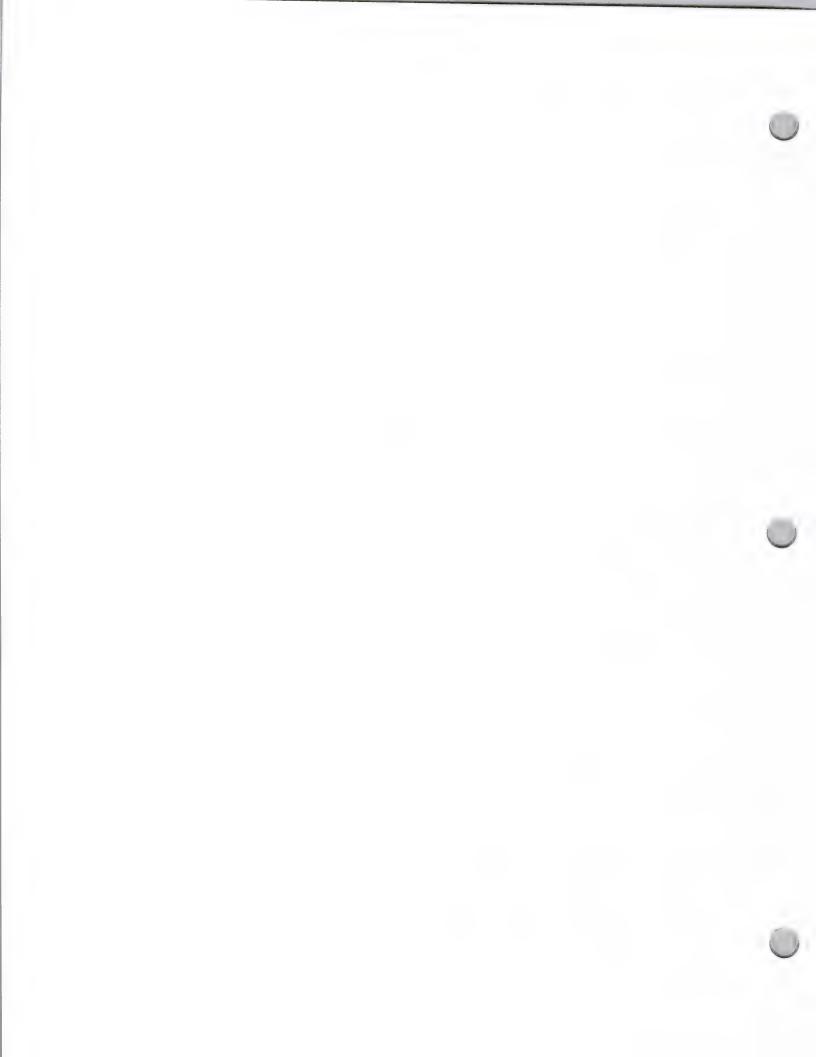
- BRENDA BUCHWITZ Developer Training
- Provide the following services:
- Teaching developers to write and design software and hardware

Host developer seminars

and conferences

Provides the following

functions:



DEVELOPER PROGRAMS ORGANIZATION

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Communication Services CHRIS WALKER Manager Monthly Mailings LAURIE WEBB Area Associate CAROL LOCKWOOD Information Services Manager LINDA GLISH MANAGER Direct Response SHARON FLESCHUTE Program Administration Manager

TBH Developer Hotline Representative

Tina Pleck/Area Associate

Lisa Rae Hawkins

Area Associate

- Representative
- TBH Developer Hotline
- Representative

- Developer Database Blanche McCoy

Developer Purchase Program

Elizabeth Christofferson

- Marie Fuggetta Recertification
- It Shipped/New Products and Compatibility Jim Tennessen Guides

- Manager
- TBH Developer Hotline

Certified Developer Program

Jana Olson

Product Information Service Eileen Devlin

Peg Bailey
 The Information Exchange

· Carol Morris Eikanas

Program Specialist

Carolyn Taylor

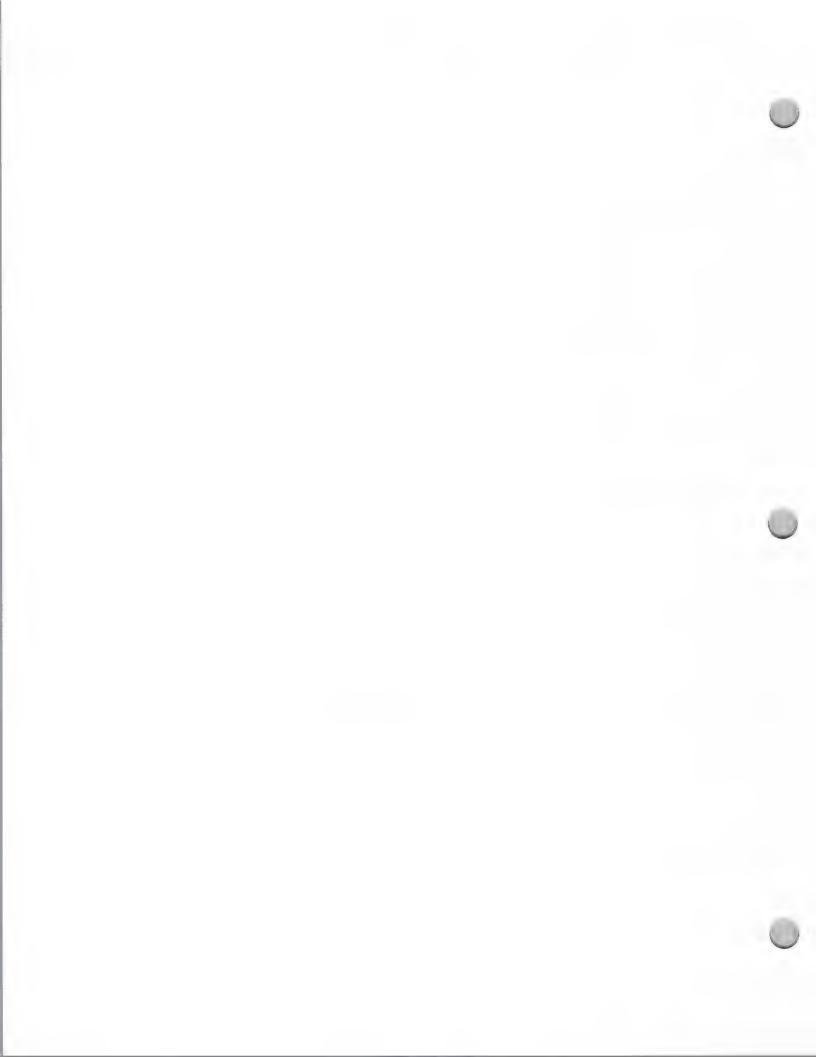
Direct Mail Program

- International Europe Roberta O'Neill
- International Pacific
- Developer AppleLink

- Tina DiGirolamo/Area Associate

Peggy Jensen/Area Associate

- PR/Tradeshows Lisa Van Horn
- Appleviewpoints Roger Dills **AppleDirect**
- Gregg Williams **AppleDirect**
- Lisa Raleigh AppleDirect
- Production Coordinator Julie Hicks-Herman
- Program Specialist · TBH





Developer Programs Focus

Apple Contacts

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Developer Programs

The Developer Programs group provides information, services, and support programs to help commercial developers produce Apple-compatible products. It serves as the developer community's primary "home base" and global information source at Apple. Developer Programs hopes to provide all necessary resources and welcomes any feedback you have on any of our programs.

Objectives

The objectives of Developer Programs are as follows:

Keep the developer community well informed about Apple's global direction—both technically and as a company

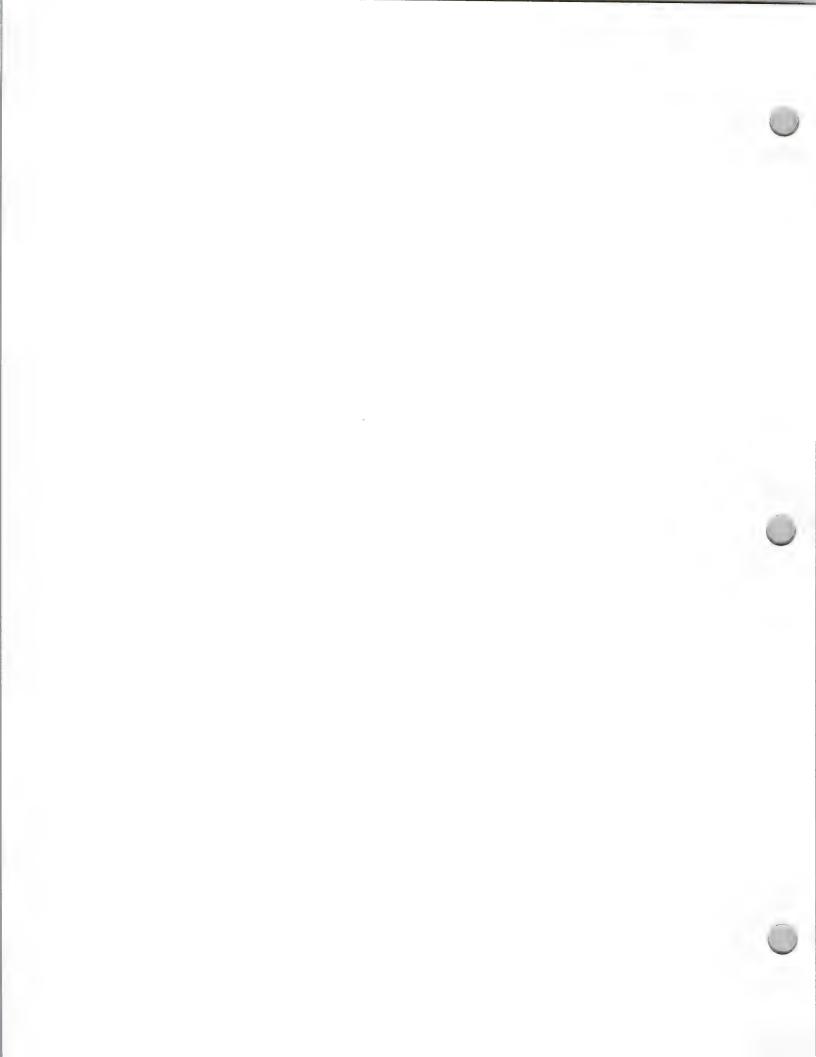
Develop and manage general support programs to provide developers with access to key development resources

Improve communication between Apple, developers, and our common customer base

Programs and Services

To accomplish these objectives, we offer developers a full range of services. Following is a brief description of the major programs and services provided by Developer Programs:

- Certified Developer Program: Apple's major developer support program, which provides you with access to fundamental development resources and information.
- Developer Purchase Program: A program that lets you purchase a limited amount of Apple equipment directly from Apple for development purposes.
- **Developer Hotline:** Developers can call (408) 973-4897 Monday through Friday from 8:00 A.M. to 5:00 P.M. to obtain information on developer programs and answers to questions about how to work with Apple.
- The Information Exchange: An ongoing information service in the form of a resource binder and HyperCard stacks that keep you informed about developer opportunities and Apple's direction as a company.
- Product Information Service: Information on each of Apple's products with system configurations and specifications of each product.
- **Apple viewpoints:** A weekly newsletter that provides you with late breaking news.
- Appledirect A monthly developer-directed newsletter that informs you about developer-oriented Apple groups, programs, and events.
- AppleLink Developer Program: A program that enables Certified Developers to provide information on their products and promotions to dealers, VARs, National





Developer Programs Focus

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Accounts, universities, Apple User Groups, and various groups within Apple. Provides access to several bulletin board programs and libraries.

- Monthly Developer Mailings: Monthly mailings that provide you with key information on Apple's product and technical direction, as well as information on development tools and resources.
- New Product Availability and Compatibility Lists: Listings of third party
 products that take advantage of the new features of Apple hardware. The group also
 publishes product compatibility listings after announcements of new Apple products.
- "It Shipped!" Program: A mechanism by which you can notify us when you ship a new product. Lists of new Apple-compatible products are compiled and distributed to key Apple groups.

How to Work with Developer Programs

If you have questions or are interested in more information about specific programs, here are the people you should contact and how to reach them:

Program	Contact	How to Reach
Department Manager	Linda Glish	(408) 973-6061 AppleLink: GLISH1
Developer Hotline		(408) 973-4897 AppleLink: DEVSERVICES MCI: 280-8669
• The Information Exchange	Peg Bailey	(408) 973-4897 AppleLink: PEG.BAILEY
• The Product Information Service	Eileen Devlin	AppleLink: DEVLIN.E
• Apple viewpoints	Roger Dills	AppleLink: DILLS1
• Appledirect	Lisa Raleigh Gregg Williams	AppleLink: RALEIGH.L GREGGW
Developer AppleLink	ТВН	
Monthly Mailings	Laurie Webb	(408) 973-3861 AppleLink: WEBB1





Developer Programs Focus

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Program

Contact

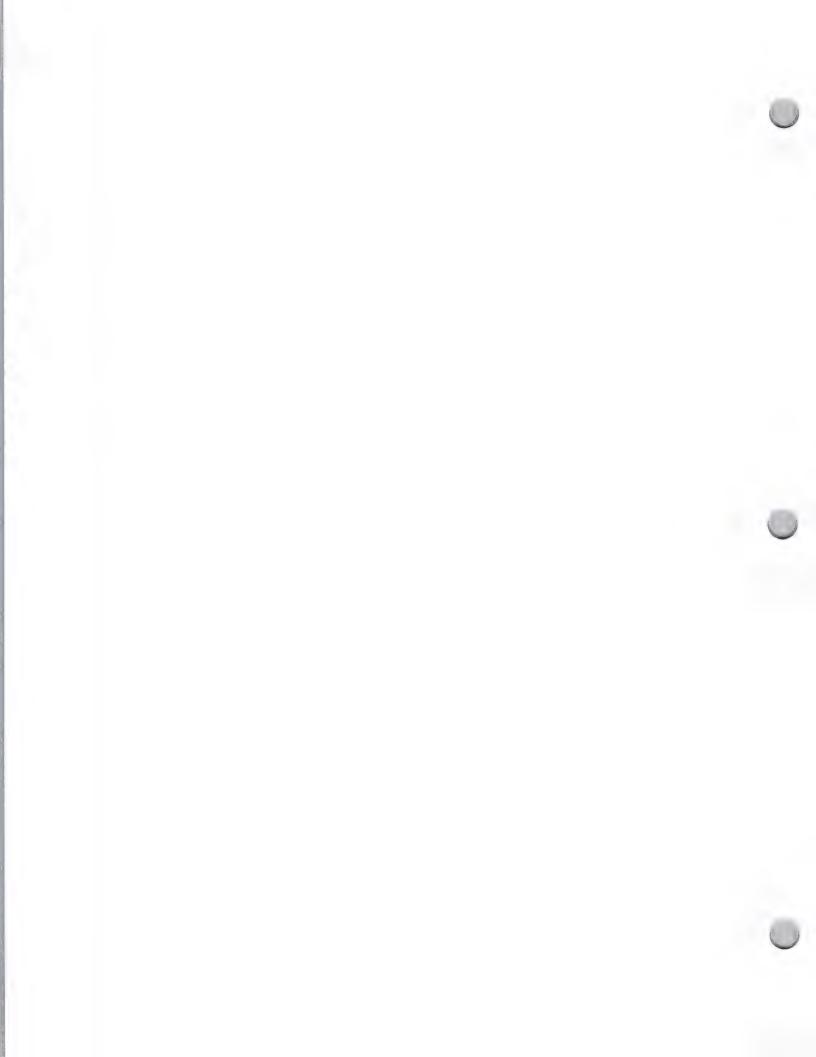
How to Reach

- New Product and Compatibility Guides, "It Shipped!" Program
- Jim Tennessen
- (408) 973-5699
- AppleLink: TENNESSEN1

- Developer Direct Mail Service
- Carol Eikanas
- (408) 973-2073
- AppleLink: EIKANAS1

The Developer Programs group can also be reached by writing to the following address:

Developer Programs Apple Computer, Inc. 20525 Mariani Avenue, M/S 51W Cupertino, CA 95014





Evangelism Focus

Apple Contacts

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What the Evangelism Group Does

The Evangelism group is dedicated to working very closely with developers to help them produce Apple® compatible software and peripheral products. The group's primary function is to provide developers with product design assistance during all phases of the product development cycle. Evangelists help developers produce new and enhanced products for existing and new Apple hardware and markets. On a limited basis, Evangelism also provides information and referrals regarding Apple's international markets.

How They Can Help You

The Evangelist group is organized into five subgroups (refer to the Evangelism Organizational Chart located in this section). Each Evangelist specializes in a particular market area, understanding its key needs, application opportunities, and Apple's priorities for that market or technology.

Evangelists provide product planning information through a number of different means; information packets, meetings, telephone conversations, and electronic mail. Evangelists answer questions such as: Which standards should I support? What features will my product need to be competitive in a specific market? What manuals or other materials will I need to include? When should I announce/ship my product for best competitive advantage and for potential Apple comarketing? Who are likely publishers/distributors for my product? How should I price and package my product?

The availability of prototype units for unannounced Apple hardware is extremely limited, so the Evangelism group has to select a small number of developers from among the thousands we serve. The group considers the following criteria:

Does the company have a product that is key to Apple's market strategy?

 Will the company make the commitment in its allocation of resources to develop a new product for Apple?

Does the company have the ability to market and distribute the product?

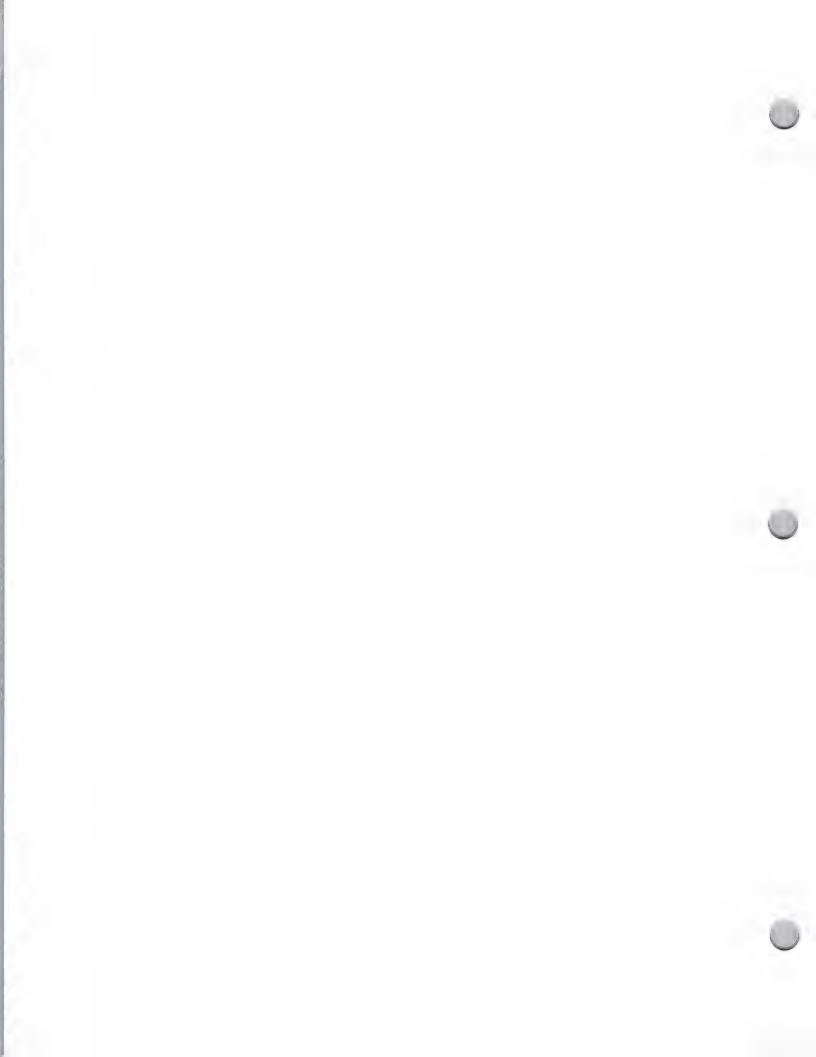
When You Should Work with an Evangelist

When you have a firm product concept, contact Apple's Evangelism group to take a look at it and give you suggestions for enhancements and conformance to Apple's interface guidelines. It is highly recommended that you contact the appropriate evangelist while you are still in the planning stages of your product, and again when you reach a beta version. It is at these two stages that the evangelists' product knowledge can benefit you the most.

How to Make Contact with an Evangelist

The most effective way to make the initial contact with your evangelist is to write a letter telling him/her about your company and product(s). All evangelists read their mail religiously! They are committed to answering your correspondence and to supporting your product development.

In your initial letter to the evangelist, please provide the following information:





Evangelism Focus

Apple Contacts

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- · Company profile
- Product line
- · Business strategies
- · Marketing strategies: current and future

Please understand that Evangelism resources are limited. With 8,000 certified developers, it's impossible for each developer to be provided with direct Evangelism contact and support. Send a letter to the appopriate Evangelist to find out whether an information guide is available for your area of interest.

To identify the appropriate evangelist, refer to the Evangelism Organizational Chart in the Apple Contacts section of this binder.

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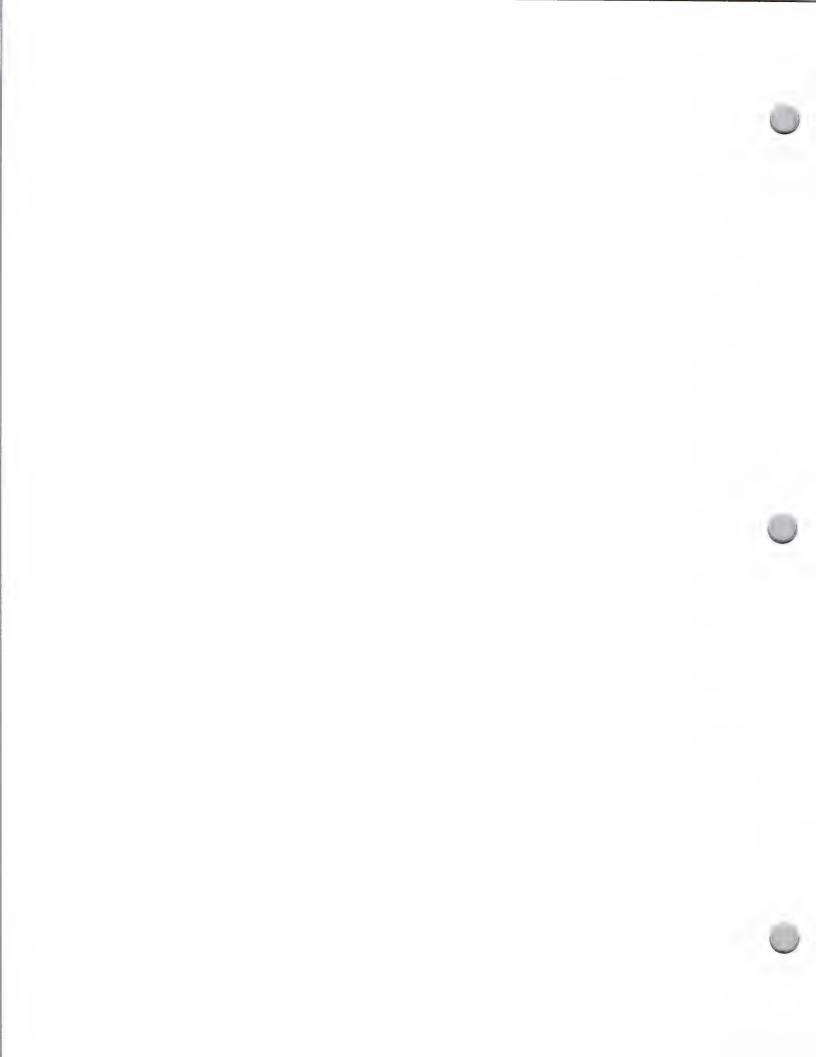


EVANGELISM ORGANIZATION, M/S 51AB

SCOTT SCHNELL MANAGER

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K - 12 Networking Education/Home Higher Education Home Office/ED Shirley Stas Marvin Zauderer Kim Creighton Area Associate Jonathan Fader Markets Evangelist Specialist K-12 TBH TBH TBH International Business **Evangelist Specialist** Margot van Vuurden Worldwide Design Human Interface Cheryll Melott Area Associate Technologies Alexis Gerard Glen Fiance HyperCard Programs A/UX TBH TBH TBH TBH Logistics Coordinator Logistics Processor/ Logistics Facilitator Logistics Processor Chuck Shelamer **Fony Livermore** Shawna Dedrick Tore Bonanno Area Associate Scott Caldwell David Stauffer Logistics International IBM Host Connectivity Evangelist Specialist Digital Connectivity System Expansion Sustem Expansion AppleTalk/Share Sys. Expansion Sherryl Jackson Area Associate Net/Comm & Susan French Ford Johnson Ron Wong Tim Kreps Jim Floyd Ethertalk CL/1 TBH High-End Publishing **Evengelist Specialist** Multimedia Software Graphics Hardware **DTPresentations** Elyse Krupnick Jim Armstrong Publishing & Area Associate Thierry Doyen Doug Sleeter Multimedia MultiMedia Office DTP Hardware TBH TBH TBH Database/Accounting/SSW Scientific/Engineering Evangelist Specialist Technical Markets **Business Learning Business Software Business Software** Senior Evangelist Moira Cullen Peggy Redpath Area Associate Business/ isa Mattioli Steve Mann Jon Magill Kin Seto TBH TBH TBH





Developer Tools Focus

Apple Contacts

November 1, 1987

The Developer Tools group is dedicated to delivering quality tools to enable the creation of outstanding Apple and third-party products. This involves both managing a coordinated family of Apple developer tools and assisting third-party developers in bringing other needed developer tools—such as programming environments, compilers, and debuggers—to market.

What Does the Developer Tools Group Do?

The Developer Tools Group is organized into three groups: Apple® II Developer Tools, Macintosh® Developer Tools, and Language Evangelism.

Apple II Developer Tools

The members of the Apple II Developer Tools group are responsible for managing the design and development of Apple II developer tools and acting as advocates of Apple II developer needs within Apple. The group is responsible for the following Apple products:

- Apple Programmer's Workshop (APW)
- Apple Programmer's Workshop C
- MPW IIGS Tools
- MPW IIGS C
- Apple IIGS® BASIC
- Various supplementary Apple II and Apple IIGS developer tools
- Technical documentation covering the Apple II family of systems

Macintosh Developer Tools

The members of the Macintosh Developer Tools group are responsible for managing the design and development of Macintosh developer tools and acting as advocates of Macintosh developer needs within Apple. The group is responsible for the following Apple products:

- Macintosh Programmer's Workshop (MPW)
- Macintosh Programmer's Workshop C
- Macintosh Programmer's Workshop Pascal
- MacApp[™]—The Expandable Macintosh Application
- Various supplementary Macintosh developer tools including localization tools
- Technical documentation covering the Macintosh family of systems and localizability guidelines

Language Evangelism

The Language Evangelism group has the responsibility of ensuring that a full suite of developer tools are available. It accomplishes this by doing the following:





Developer Tools Focus

Apple Contacts

November 1, 1987

• Encouraging the development of third-party developer tools

 Providing product design assistance to third-party language and tools developers during all stages of development

 Managing the logistical and administrative aspects of Apple's relationship with the Apple Programmer's and Developer's Association (APDA)

In addition, the Developer Tools group produces Apple II and Macintosh Development Software: A Guide to Languages and Tools. If you are looking for developer tools to aid you in your efforts, this is an excellent resource, because it lists all Apple II and Macintosh developer tools of which we are aware. If you market a language or utility product, you should contact the Developer Tools group with information about your product so that it can be included in the next edition of the Guide to Languages and Tools. Copies of the guide are included in the Ceritified Developer packet and are also available from the APDA. (For more information about this guide, refer to the Languages and Tools note in the Distribution section.)

The Developer Tools Group can be reached at the following electronic-mail addresses:

MCI Mail: DEV.TOOLS AppleLink®: DEV.TOOLS

The Developer Tools Group can also be reached at the following address:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 27S Cupertino, CA 95014 Attn.: Developer Tools Group (408) 973-6265

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Apple Contacts

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All Apple Certified Developers are automatically eligible to receive technical support from the Developer Technical Support group at Apple Computer. This group helps you in your development process in a variety of ways, some of which are described below. They do not, however, provide end-user support for Apple® (or third-party) products.

The following information will help you understand how this group works, so that you can get the technical help you need.

Technical Notes

Technical Notes are written by Developer Technical Support. They clarify and expand upon Apple's hardbound documentation, provide programming examples, and warn of impending changes that may affect your products' development and future compatibility. They also address localizability issues. The Macintosh™ and Apple II Technical Notes are sent out on alternate months in the Developer Programs mailing. You may get back issues of the Technical Notes from the Apple Programmer's and Developer's Association (APDA). They are also posted on AppleLink in the Developer Services icon.

Answers to technical questions

The Developer Technical Support group answers technical questions that come up during your software and/or hardware development. You may query the DTS group using AppleLink, MCI Mail, or the U.S. Mail. Sorry, we cannot offer you telephone support.

The Developer Technical Support (DTS) group's purpose is to answer specific developmental questions that developers run into during software and hardware development. This includes things like the ROM, development systems, system software, and a variety of other programming issues. DTS will handle your development-related questions; any other type of question should be asked of your dealer or your local user group.

In addition to answering development questions, DTS also registers creators and file types, writes technical notes and sample programs, supports seeded products, warns developers when we know their applications will break on future (sometimes unannounced) products, maintains the DTS support portion of the Developer Services AppleLink bulletin board, and tries to represent developer interests within Apple.

To ensure they give you the best possible response with the least amount of guesswork, please make your questions as complete as possible. Things to include are the following:

- · A general idea of what you are trying to do
- Detailed description of the problem
- The development environment, including version numbers
- The system configuration, both hardware and software, including version numbers
- The possibilities you've already exhausted (and their results)
- Name, company name, postal address and phone number (in case they need to send you something or call for clarification)





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The DTS group strives to answer your questions within 24 hours of conferring on your situation. However, the Macintosh group currently divides its time between responding to developers' questions and focusing on high-impact projects (like technical notes, sample code, improved technical documentation, and known bug lists). Because of this refocus and a current shortage of MacDTS engineers, you will probably not receive an answer from MacDTS within 24 hours. You will, however, receive a message telling you that your question was received and when it will be answered. The MacDTS group is furiously recruiting and hopes to return to their goal of 24 hour turnaround within six months. The Apple II group is fully staffed and will continue to provide the above mentioned high-impact projects as well as 24 hour turnaround on development questions.

If you want to reference an earlier message to DTS (or one from them), you should let them know what day it was sent. They keep a record of every message, who responded to it, and when they responded. They also keep track of their responses, so they always have access to what they told you.

For your reference, here are the Technical Support group's electronic mail addresses:

Apple II Technical Support

MCI Mail: AIIDTS or 264-0103

AppleLink: AIIDTS

Macintosh Technical Support

MCI Mail: MACDTS or 215-0798

AppleLink: MACDTS

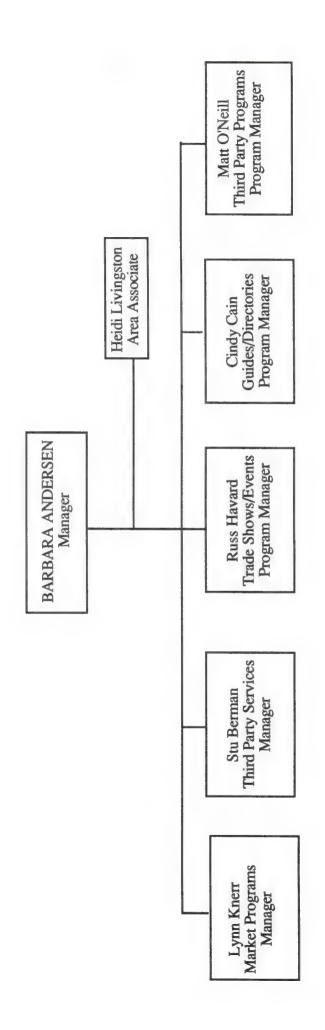
Following is their U.S mail address:

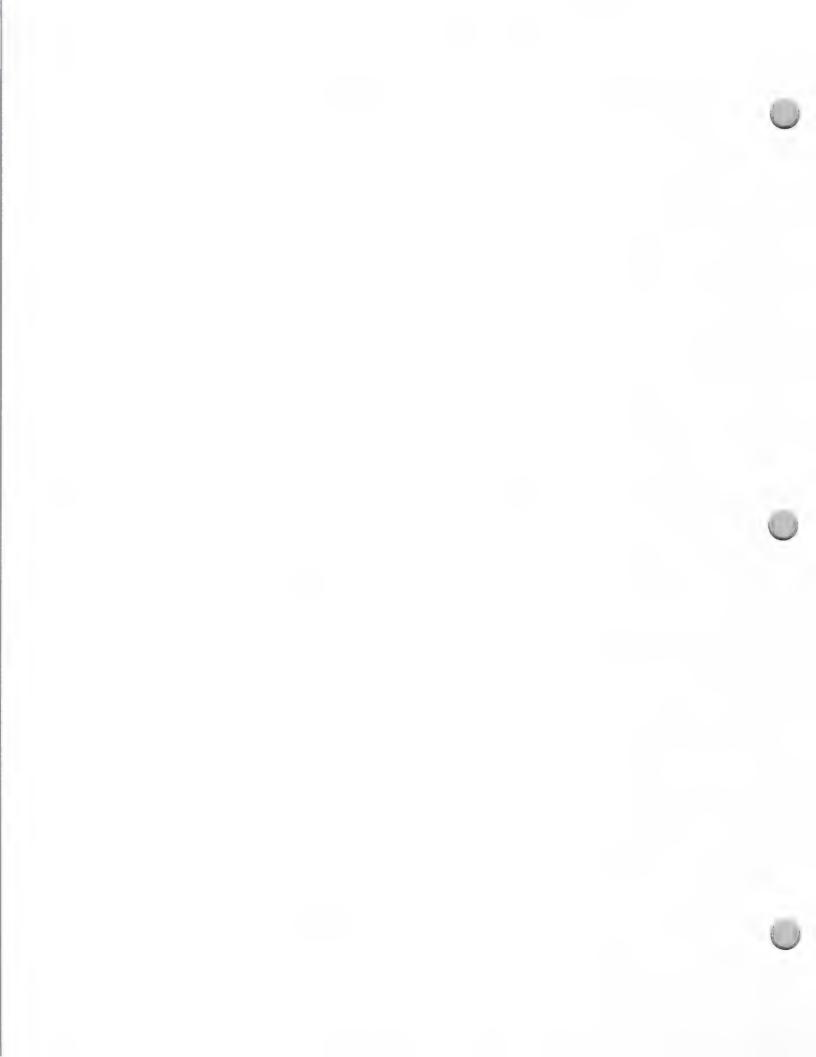
Developer Technical Support (specify Macintosh or Apple II) Apple Computer, Inc. 20525 Mariani Avenue, M/S 51T Cupertino, CA 95014

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THIRD PARTY MARKETING ORGANIZATION, M/S 36P







International Contacts

Apple Contacts

October 1, 1988

AMME (Africa, Mediterranean, Middle East) AUSTRALIA

Apple Computer 10 Cours Michelet - La Défence Cedex 51, 92065 Paris, France Phone: 33-1-47-75- 12-18 FAX: 33-1-49-01-90-51

3rd Party Mgr.: Hesham Abu El Ata Technical Contact: Luc Michel Six AppleLink: ABUELATA1 & SIX1

AUSTRIA

Apple Computer Ges.mbH Ungargasse 59 A-1030 Vienna, Austria Phone: 43-222-63-88-40 FAX: 43-222-72-16-546 3rd Party Mgr.: Karl-Heinz Mayer Technical Contact: same as above AppleLink: A.MKTG

CANADA

Apple Canada, Inc. 7495 Birchmount Road Markham, Ontario, Canada L3R 5G2 Phone: (416) 477-5800 FAX: 416-477-6305 3rd Party Mgr.: Richard Wah Kan Technical Contact: Richard Clark AppleLink: WAHKAN/ CLARK2

EUROPE

Apple Computer Europe 10 Cours Michelet - La Défence Cedex 51, 92065 Paris, France Phone: 33-1-47-75- 12-18 FAX: 33-1-49-01-90-51 3rd Party Mgr.: Neil Minkley Technical Contact: Alain Andrieux AppleLink: MINKLEY1/ANDRIEUX1

Apple Computer Australia Pty. Ltd 16 Rodborough Road Frenchs Forest, NSW 2086, Australia Phone: 61-2-452-8000 FAX: 61-2-452-8160 3rd Party Mgr.: Peter Higgs Technical Contact: Alan Bell AppleLink: AUST3PP & AUST.DEV

BELGIUM

Apple Computer NV-SA 103, rue Colonel Bourgstraat 1040 Brussels, Belgium Phone: 32-2-735-60-50 FAX: 32-2-735-76-19 3rd Party Mgr.: Chris Van Roey Technical Contact: Ivo Van Ursel AppleLink: BEL.PROD/URSEL1

DENMARK

Apple Computer A/S Sortemosevej 2 3450 Allerød, Denmark Phone: 45-2-140-202 FAX: 45-2-140-222 3rd Party Mgr.: Jeff Snider Technical Contact: same as above AppleLink: SNIDER1

FAR EAST

Apple Computer International Ltd. 14/F Exchange Tower II 8 Connaught Rd., Central, Hong Kong Phone: 852-5-844-2400 FAX: 852-5-810-0073 3rd Party Mgr.:Henry Cheuk Technical Contact: Kane Cheung AppleLink: FE.PROD.MKTG/FE.PROD.DEV





International Contacts

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FRANCE

Apple Computer France Avenue de l'Océanie, 12 Z.I. de Courtaboeuf, B.P. 131, 91944 Les Ulis, Cedex, France Phone: 33-1-69.28.01.39

FAX: 33-1-69.28.74.32 3rd Party Mgr.: Marc Ducamp

Techical Contact: Christophe Droulers AppleLink: FRA.PROD/DROULERS1

HOLLAND

Apple Computer BV Huis ter Heideweg 50 3705 LZ Zeist, The Netherlands Phone: 31-3404-86911 or 86922 FAX: 31-3404-17727 3rd Party Mgr.: Hans Appel Technical Contact: same as above AppleLink: HOL.PROD/HOL.DEV

JAPAN

Apple Computer Japan

Dai 25 Mori Bldg, 23F 1-4-30 Roppongi, Minato-ku Tokyo 106, Japan Phone: 81-3-224-7000 FAX: 81-3-584-3654 3rd Party Mgr.: James Higa Technical Contact: Kenji Yamada AppleLink: HIGA2/TECH.SUPT.JA

NORWAY

Apple Computer AS Sandviksveien 26 1322 Høvik Norway Phone: 47-25-91-800 FAX: 47-21-23-080 3rd Party Mgr.: Oyvind Lundgreen

Technical Contact: Staale Olesen AppleLink: LUNDGREEN1/OLESEN1

GERMANY

Apple Computer GmbH Ingolstadterstr. 20 8000 Munich 45, West Germany Phone: 49-89-35-03-40 FAX: 49-89-35-03-41-80 3rd Party Mgr.: Herman Stehlik Technical Contact: Uwe Falck AppleLink:STEHLIK/FALCK1

ITALY

Apple Computer S.p.A. Via Rivoltana, 8 20090 Segrate (Milano), Italy Phone: 39-2-75741 FAX: 39-2-753.43.03 3rd Party Mgr.: Bruno Pennino Technical Contact: Roger Stewart AppleLink: ITA.3RDPARTY (for both)

LATIN AMERICA

Apple Computer, Inc. 20525 Mariani Ave., MS 29F Cupertino, CA 95014 Phone: (408) 973-6366 FAX: 408-973-2277 3rd Party Mgr.: Ricardo Gonzalez Technical Contact: same as above AppleLink: GONZALEZ3

SPAIN

Apple Computer España S.A. Paseo de la Castellana 95, Planta 26 28046 Madrid, Spain Phone: 34-1-597.47.50 FAX: 34-1-593.04.71 3rd Party Mgr.: Luigi Limido Technical Contact: same as above AppleLink: LIMIDO1





International Contacts

Apple Contacts

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SWEDEN

Apple Computer AB Box 31 16493 Kista - Stockholm, Sweden

Phone: 46-8-793.09.00 FAX: 46-8-751.60.97 3rd Party Mgr.: Jan Jivmark Technical Contact: same as above

AppleLink: JIVMARK1

UNITED KINGDOM(ENGLAND)

Apple Computer LTD
Eastman Way-Hemel Hempstead
Herts HP2 7HQ, England
Phone: 44-442-60244
FAX: 44-442-211021

3rd Party Mgr.: David Smith Technical Contact: Jennie Rose

AppleLink: UK.DEVSERV (for both)

SWITZERLAND

Industrade AG / Apple Computer Division Hertistrasse 31

8304 Wallisellen, Zurich, Switzerland

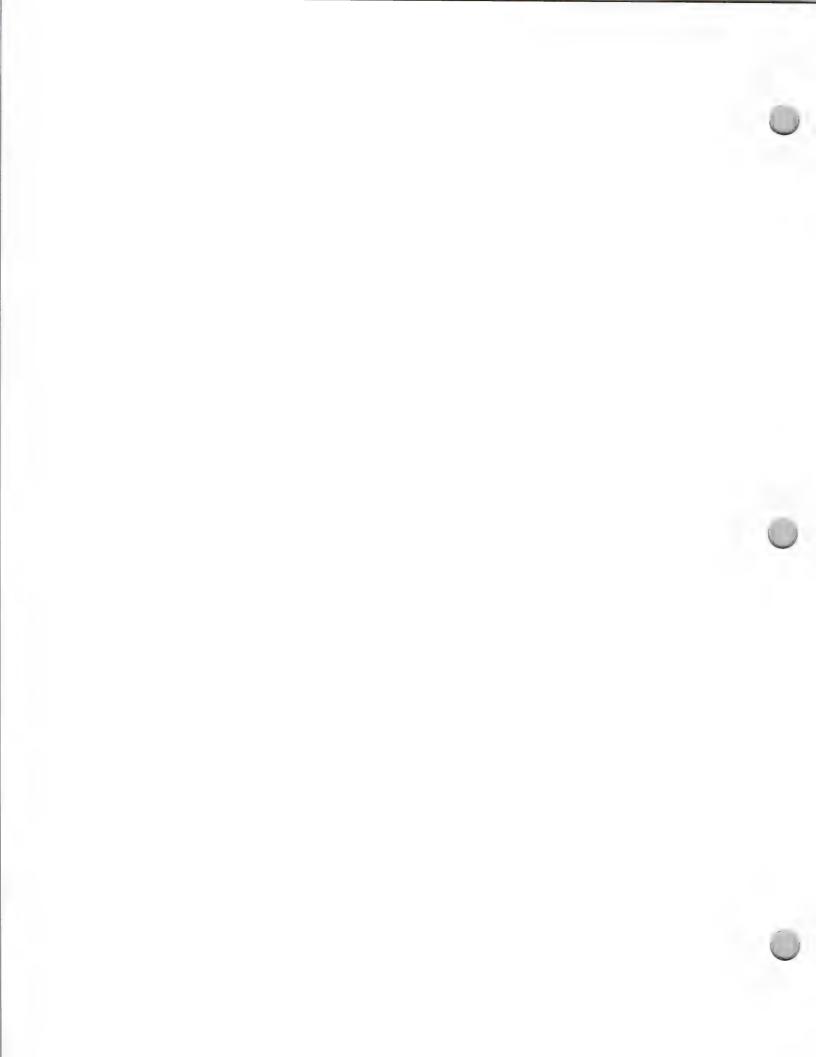
Phone: 41-1-830.50.40 FAX: 41-1-830.75.50

3rd Party Mgr.: Christian Graber Technical Contact: Urs Binder AppleLink: IT0014 (for both)

UNITED STATES

Apple Computer, Inc. 20525 Mariani Ave., MS 51W Cupertino, CA 95014

Phone: (408) 973-4897 AppleLink: DEV.SERVICES FAX: (408) 973-2607





Quick Reference Chart

Apple Contacts

October 1, 1988

Department	Phone	AppleLink Address	MCI Mail Address	M/S
Apple Contacts				
Apple Corporate Operators	(408) 996-1010			
(Dial the prefix (408) 973 pl	lus the extension)			
ACOTTM (Apple Classroom				
of Tomorrow)	x5219	ACOT	*********	22-J
Adult Education and Literacy Group	x4268	Kelley1	• • • • • • • • • • • •	36-AF
AppleLink® Hotline	x3309	Comments		37-R
Apple Company Store	x5050	The.Co.Stre	**********	8-B
Apple Computer Clubs		Reynolds4	******	36-AA
Apple Direct Newsletter	x3264	GreggW	*******	51-W
	x2607	Raleigh.L	* * * * * * * * * * * * * * * * * * * *	51-W
Apple Viewpoints Newslette	er x6066	Dills1		51-W
Apple Library Users Group	x2552	Ertel1		8-C
Apple® II Technical Suppor	t	AIIDTS	AIIDTS	51-T
Bug Report Center		MACDTS or	AIIDTS	51-T
Business Marketing Group	*****			36-N
Charlotte Support Center	(704) 357-4500			
Community Affairs (formerly	x2974	CA\$		38-J
Apple Corporate Grants)				
Developer Products Group	x6525	Dev.Tools	303-6066	27-S
Developer Programs Hotline		Devservices	280-8699	51-W
Direct Mail Service	x2073	Eikanas1	******	51-W
Evangelism Group	x3289	Evangelism	272-8478	51-AB
Government Group		**********	******	36-F
Higher Education Mktg Gr			******	43-N
It Shipped! Program	x5699	Tennessen 1	*******	51-W
K-12 Marketing Group			******	43-E
Legal	x6060	Law.CPTO\$	• • • • • • • • • • • •	38-I
Mac.ProgrammingSeminars		MPS	3.6 75000	50-A
Macintosh™ Technical Supp		MacDTS	MacDTS	51-T
Micro-Computing Supp. Gr		Micro. Supt	*******	4-Y
Sales Technical Support	x6656	Converse1	210 5260	37-O
Software Licensing Strategic Investment &	x4667	SW.License	312-5360	38-I
Corporate Development Gr		Enea1	*****	38-G
Success Story Program	x5115	Biz.Success	******	36-N
*Sunnyvale Support Center	(408) 734-9790		*******	• • • • •
Sunnyvale Support Cente	r (408) 744-6265	Bronte1	****	
Technical Markets (formerly	******		*****	36-D





Quick Reference Chart

Apple Contacts					October 1, 1988
Engineering/Scientific Group) The Office of Special Educatio	n x2732	Special.Ed	• • • • • •	• • • • • •	36-M
Department P	hone	AppleLink Address	MCI Add		M/S
Third Party Marketing Group Trade Shows Guides and Directories Promotions/Merchandising/ Joint & Co-op advertising User Group Connection Wash. D.C. Office (federal market	x3929 	ThreePM.HO Havard1 Cain1 Oneill5 User.Group Fed.Gov\$	s	•••••	36-P 36-P 36-P 36-AA
Apple-Related Contacts	Phone	Apple	eLink	MCI	Mail
		Add	dress	Add	dress
APDA Apple A/UX Dealer Operator Apple Dealer Operator Apple DTC Dealer Operator Apple DTP Dealer Operator Apple Ed. Dealer Operator Apple Music Dealer Operator Area User Group Operator Kinko's ACE (outside CA) Kinko's ACE (in CA) MCI Mail World Data Corporation	(206) 251-6548 (800) 538-9696 (800) 538-9696 (800) 538-9696 (800) 446-3000 (800) 538-9696 (800) 538-9696 (800) 235-6919 (800) 292-6640 (800) 444-6245 (516) 931-2442	x100 x700 x508 x480 x750	DA	312-7	7449

- * Contact this support center if you're located in one of the following states: Arizona, Arkansas, Colorado, Kansas, Louisiana, Missouri, Nevada, New Mexico, Oklahoma, Southern California (area codes 209, 213, 619, 714, 805), Texas, and Utah.
- ** Contact this support center if you're located in one of the following states: Alaska, Idaho, Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Northern California (area codes 408, 415, 707,916), Oregon, Texas, Washington, and Wyoming.



October 1, 1988

Third Party Marketing

Third Party Marketing provides developers with joint marketing opportunities through a variety of program offerings. In addition, we support Apple's Marketing groups in the selection of third party software and peripheral products for inclusion in Apple marketing and sales activities.

Objectives

Third Party Marketing's objectives are:

- To enhance Apple's ongoing relationship with key software and hardware publishers
- To increase the visibility of third party solutions within Apple and among Apple's key constituents
- To support the marketing efforts of third parties by providing information about Apple marketing and sales activities

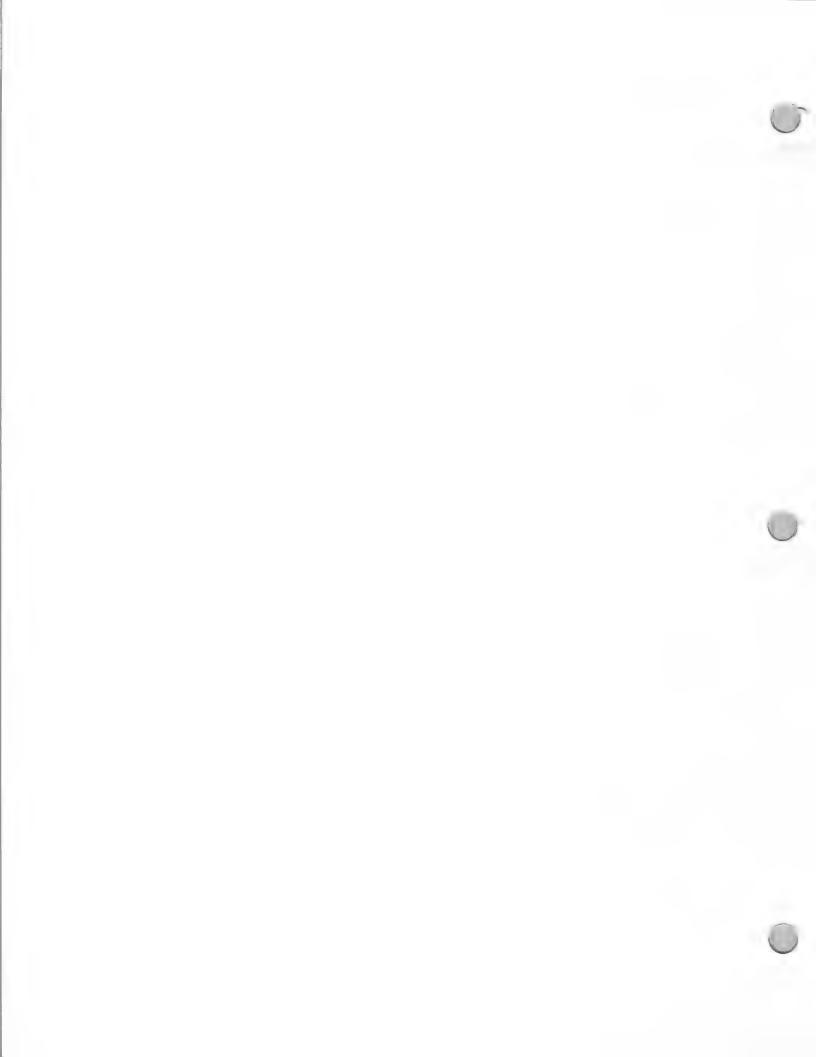
Focus

The Third Party Marketing department at Apple addresses the marketing needs of third party publishers of Apple-compatible hardware and software. We direct third party oriented marketing programs that complement the activities of Apple's Marketing groups. Our primary focus is on assisting developers with products that are currently shipping and are strategically linked to Apple's success in the Business, Government, Technical and Education markets (please refer to the profiles of these markets noted elsewhere in this publication).

Third Party Marketing Programs

Two complementary groups make up the Third Party Marketing department. One group manges broad-based, horizontal programs for publishers. These programs include managing a database of third party products, publishing directories, developing and maintaining a software library and developer demonstration center, and managing face-to-face selling opportunities for publishers at industry trade shows and Apple events.

A complementary group manages programs that address the needs of publishers related to a specific market segment. In addition this group provides third parties with information about Apple's marketing strategies and plans. They work to integrate Apple technology with third party products in order to provide the total solution to potential Apple customers.





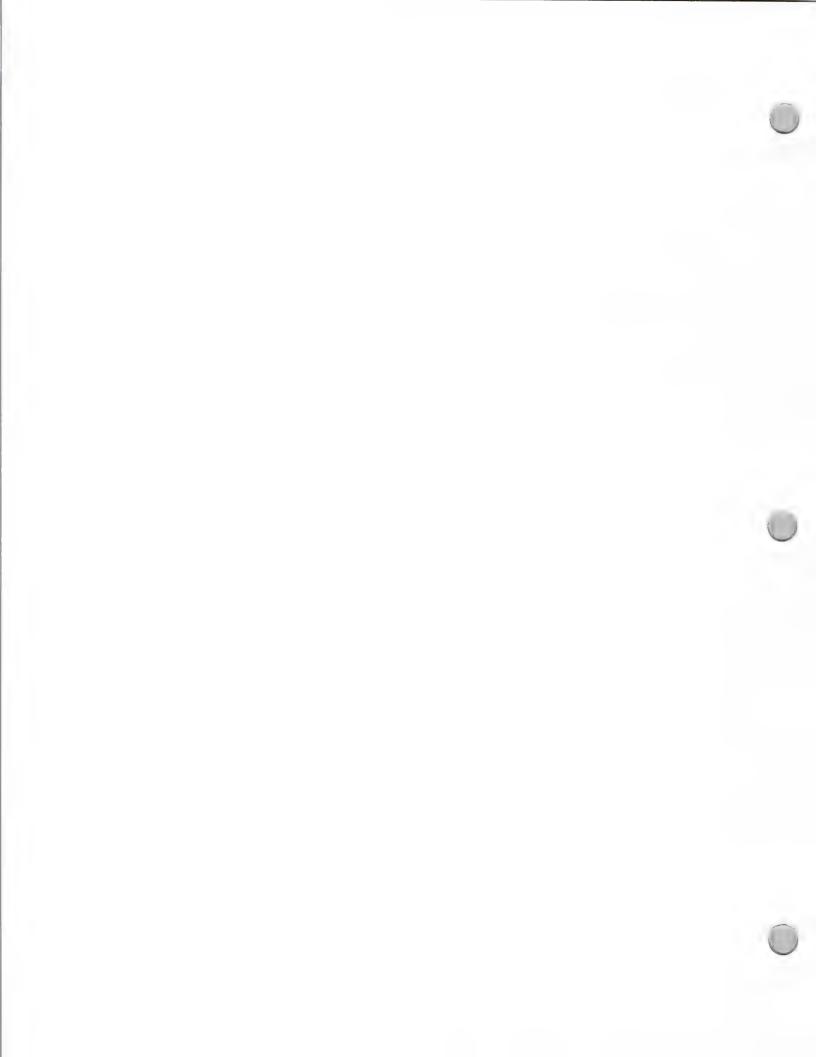
October 1, 1988

Making Contact

To pursue joint marketing activity with Apple, contact the Third Party Marketing department via our hotline telephone number or our Third Party AppleLink address.

Apple Computer, Inc. 20525 Mariani Avenue, M/S 36AA Cupertino, California 95014 Attn.: Third Party Marketing

AppleLink: ThreePM.Hot Telephone: 408-973-3929





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Over the last two years, MacintoshTM products have found excellent acceptance among technical professionals as multipurpose productivity and publishing tools. It is estimated that of the Macintosh computers that are used in business today, 10 percent are on the desks of engineers, scientists, architects, programmers, systems analysts, and other technical professionals.

To broaden and deepen Apple's position in the engineering/scientific market, Mike Homer of Apple's Business Development group has been building a dedicated Engineering/Scientific team. The purpose of the newly formed marketing group is to focus on establishing Macintosh as the personal workstation for the technical professional, and to demonstrate that Macintosh is a serious technical machine, for all aspects of a designer's work.

Engineering/Scientific plans for 1988

Marketing objectives

There are already a large number (approximately 300) of both productivity and specialized third-party products for the Macintosh that address the needs of the engineering market. To further strengthen Apple's role in this market, the Engineering/Scientific group intends to do the following:

•Broaden and deepen Macintosh penetration by raising awareness of Apple among technical professionals and emphasizing use of Macintosh as a workstation for the technical professional.
•Emphasize solutions for the broad, horizontal market, which needs general-purpose drafting tools.
•Build up engineering-specific solutions, in-house technical expertise, and a sales and support infrastructure that will allow Apple to move into specific vertical segments within the engineering/scientific market.

Solution focus

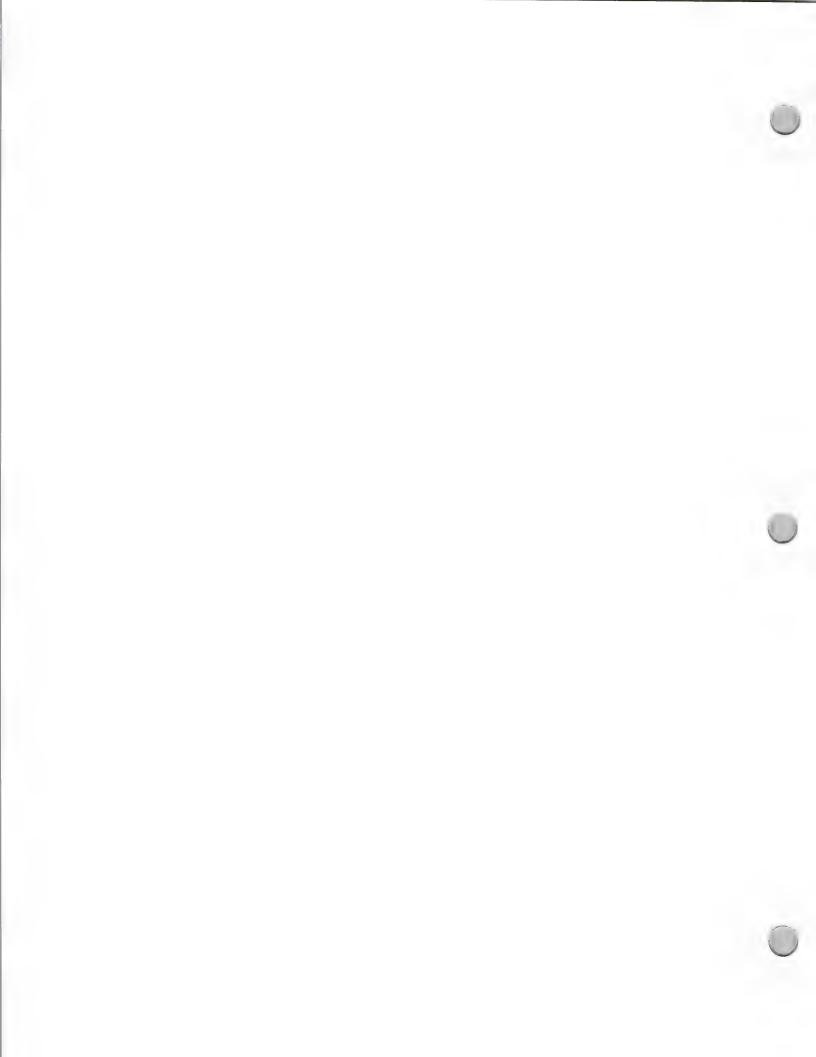
Programs will generally focus on the technical productivity capabilities of the Macintosh, as well as specific solutions in the following areas:

- Mechanical engineering
- Architectural engineering and construction
- Electrical engineering
- Software engineering
- Science (chemistry, statistics, math, physics)

Marketing activities

The Engineering/Scientific group plans to promote and communicate current Macintosh solutions through the following marketing and sales programs and activities:

- Brochures
- Engineering solutions directory
- Regional seminars



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Marketing activities, continued:

- Vertical-market magazine advertising
- Public relations activities
- Industry and segment-specific trade shows (for example, AEC Systems and Siggraph)

How to work with Apple

The Engineering/Scientific group asks that you write Third Party Marketing if you are interested in comarketing activities. Third Party Marketing will be responsible for working with the Engineering/Scientific group and for notifying its members about your product(s).

If you have a new product to promote, please send the following information to the appropriate marketing contact (refer to the Third Party Marketing Focus in the Marketing and Sales Information section):

- A full working version of your product
- Market materials that explain the product's features and benefits, and offer examples of its use
- · Published reviews
- Customer reference lists
- Any special training materials
- · Demo disks and scripts

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Government Marketing Plans for 1988/89

Apple's Government Marketing efforts are the focus of two separate organizations: Apple Federal Systems Group (AFSG); and the State and Local Government marketing group. The marketing plans of the two groups call for a focused effort to establish the MacintoshTM as a mainstream computer workstation in federal, state, and local governments, by providing government solutions through direct Apple channels and specialized resellers.

In addition, the groups plan to introduce powerful Macintosh productivity solutions that extend beyond the typical mainframe applications used in the government market.

Macintosh computers have already begun to find their way into government for the following uses:

- Word processing and general productivity tasks
- Desktop Mapping
 - Forms Processing
- Fire Control
- Law Enforcement
- Facilities management
- Planning
- Training

Product Focus

The Government Marketing groups will offer systems approaches to government, efficiently unifying Macintosh computers with existing MS-DOS, AT&T UNIX[®], IBM, and DEC systems, and other government standard environments. The main marketing objective is to integrate Macintosh into the government environment, by offering interoperability with an installed base of heterogeneous computer systems, and by automating manual processes with the user-friendly Macintosh solutions.

Solutions developed by third parties also play an important role in Apple's government marketing strategy. Apple's Government Consortium program managed by the Third Party Marketing organization provides product focus and communication to independent developers who are interested in government marketing.

In 1989, the Government Marketing groups will work with the Third Party Marketing organization and developers to bring new solutions to the government area. Its goals are to do the following:

- Demonstrate Apple's superior solutions in office automation, desktop mapping, forms processing, desktop publishing, Engineering/Scientific, and desktop communications.
- Support de facto standards, specifically UNIX[®], MS-DOS, POSIX, TCP/IP and GOSIP.
- Emphasize data communications and systems compatibility.
- Support leading-edge technologies such as CD-ROM, videodiscs, and OCR scanners.
- Customize general-purpose products for government solutions when necessary.





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Apple's Government Marketing Groups welcome the opportunity to work with developers, helping them to understand the government markets and how to successfully do business in them. For example, the groups will communicate product needs and priorities to developers, as well as provide assistance with their government promotions, advertising, and communications strategies.

How to work with the Government Marketing Groups

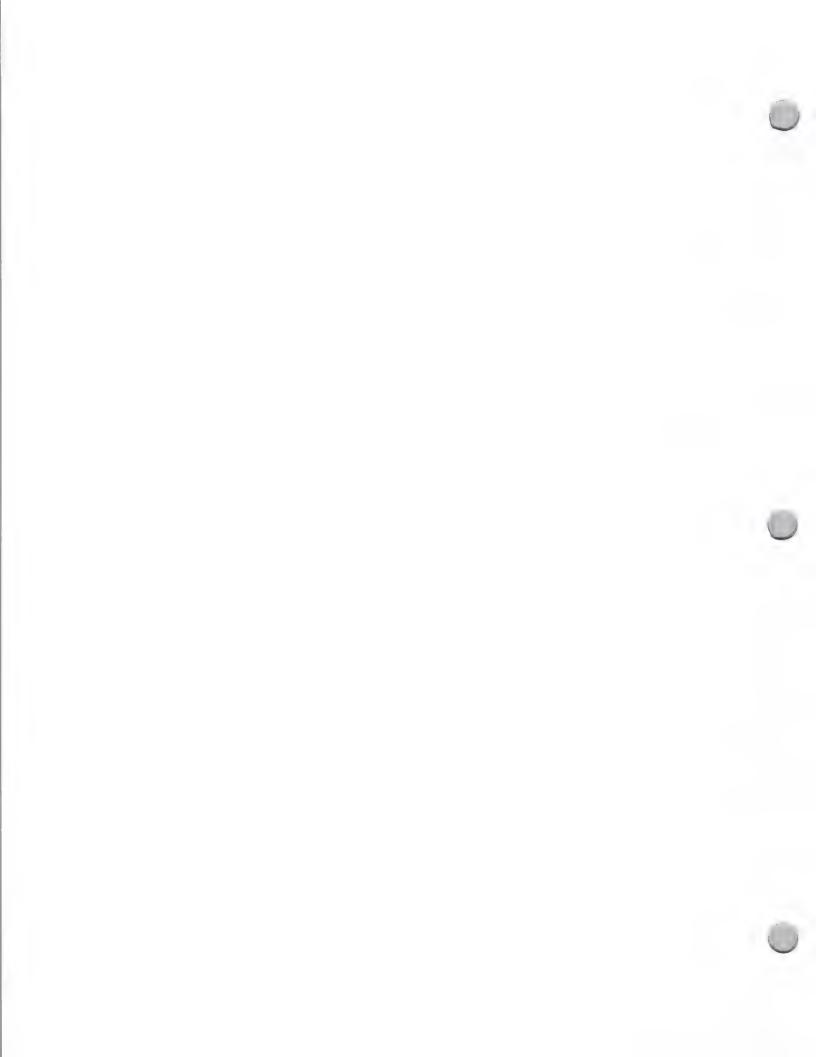
The Apple Federal Systems Group and State and Local Government marketing group ask that you write them if you are interested in comarketing opportunities. If you have a product to promote, you should send the following information to the appropriate marketing contact (whom you can locate by referring to the Third Party Marketing Focus in this section);

- Full working product
- Marketing materials that explain features and benefits, and offer examples of the product's use
- Published reviews
- Customer reference lists
- Any special training materials
- Demo disks and scripts

You can reach the Apple Federal Systems Group and the State and Local Government marketing group at the following address:

Government Marketing Apple Computer, Inc. 20525 Mariani Avenue, M/S 36P Cupertino, CA 95014

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Business Marketing Focus

Marketing and Sales Information

October 1, 1988

Business Marketing Plans for 1988

Product Focus

The Apple Business Marketing group's plans call for continued effort to establish the MacintoshTM family in large, medium, and small businesses. Emphasis will be placed on the following solution areas:

- Executive information systems
- Connectivity and communications
- Desktop publishing and presentations
- Integrated office
- Sales and Marketing
- Information Management and Analysis

Market Focus

The Business Marketing group aims to establish an even stronger Macintosh presence in existing business markets such as:

- Accounting
- Legal

- Office automation
- Health Care

Promotions

The Business Marketing group will make the following promotional efforts:

- Attend many business trade shows (refer to Trade Show section)
- Conduct programs that focus on dealers working with consultants to sell accounting solutions
- Conduct programs aimed at strengthening dealers' expertise as desktop publishing specialists
- Sponsor and promote Apple Business Forums
- Hold seminars that address productivity solutions for engineers
- Conduct programs to promote sales to workgroups (ie, system sales)

How to Work with the Business and Third Party Marketing Groups

The Business and Third Party Marketing groups ask that you write if you are interested in comarketing opportunities. In virtually all cases, the Third Party Marketing group will be your contact. Please refer to the Third Party Marketing Organization to identify the appropriate contact person, and send the following:

- Full functioning product
- Marketing materials that explain features and benefits, and offer examples of the product's use
- Published reviews
- Customer reference lists
- Any special training materials
- Demo disks and scripts

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Home Market Focus

Marketing and Sales Information

October 1, 1988

The Apple Home Marketing Groups

The Apple Reorganization. In May 1988, the Apple Consumer Marketing Group was divided into two separate groups: the Home Business group and the Home Education group. The Home Business group reports to Apple Business Marketing. The Home Education group is part of the Apple Education Marketing organization.

The Benefits of the Reorganization to Apple Consumer Marketing Efforts. Research indicates that the home market continues to be a large, growing, highly attractive market for Apple. It also shows that the primary reasons given for purchase of a home computer are business and educational uses. This reorganization will allow Apple to sell business and education solutions to the home market more effectively by leveraging our successes and programs in the business and education markets.

The Home Business and Home Education groups will continue to work together on retail programs for the consumer market.

Product Positioning for Home Business and Home Education

The charter of the two groups is to continue to develop and support solutions that target consumers in the home.

The Home Business group will leverage the business world's acceptance of the Apple® Macintosh® personal computer and support development of the Macintosh as a work-at-home personal computer.

The Home Education group will leverage our leadership position in the K-12 market by continuing to focus on the Apple IIGS® personal computer. Apple consistently positions the Apple IIGS as a computer that can bring education from the classroom into the home.

Development Opportunities for the Macintosh and Apple II

Macintosh Plus and Macintosh SE

Development Objective: Leverage the Macintosh system's wide acceptance in the business world. Work at home has become a strong reason to buy a Macintosh for the home.

Specific Third-Party Opportunities: Apple is looking for home-business products that can help people both to start home businesses and to manage them on an ongoing basis. These products need to be extremely easy to learn, to provide extensive self-paced training support, and to offer flexibility and room for individuality. Products should exhibit the following characteristics:

- Full use of the Macintosh user interface
- Mouse support
- On-line training
- Ability to use MS-DOS information (through data transfer products)
- Ability to interface with complementary products—such as a database with a forms-management program





Home Market Focus

Marketing and Sales Information

October 1, 1988

· A breadth of features at a reasonable price point

• Printing capabilities on the ImageWriter® LQ and LaserWriter® IISC printers

In addition, there is a continuing need for more entry level, low cost desktop publishing, forms-management, database, spreadsheet, and mailing-management packages. Information access and submission products—such as financial market analysis products—should take advantage of expanding modem usage, and offer new capabilities to the home worker. We could also use HyperCard® stacks for home business.

Apple II Computers and Peripherals

Development Objective: Leverage leadership position in the K-12 market. Home education has proved to be the major reason to buy an Apple personal computer for the home.

Specific Third-Party Opportunities: Apple is targeting several new areas for Apple II application development. These are, in order of importance, as follows:

Music and speech

- Mouse-based productivity
- On-line communications
- Graphic design

Development efforts should support three key features of the Apple II:

- 3.5 inch media
- The graphics and sound capabilities of the Apple IIGS
- Apple user interface

Comarketing Opportunities for the Home Market

The Home Marketing groups will continue to develop several large scale programs per year, nearly all of which feature developer participation.

During spring—summer 1988, we are launching a consumer promotion on the Apple IIGS and the Macintosh Plus targeted at home education and home-business prospects. Information on third-party products is being provided by dealers through point-of-sale materials. We will continue to develop programs for the consumer market as a whole, and for the two targeted segments of the consumer market. We look forward to working with you on these programs.

How to Work with the Home and Third Party Marketing Groups

The Home and Third Party Marketing groups ask that you write if you are interested in comarketing opportunities. In virtually all cases, the Third Party Marketing group will be your primary contact. Within this group, your key contacts will be the home market, business market, and education market managers. (Please refer to the Third Party Marketing organizational chart in the Apple Contacts section for the appropriate contact.) Your letter should include the following:

A full working version of your product in its final package

Marketing materials that explain features and benefits, and offer examples of the product's use





Home Market Focus

Marketing and Sales Information

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- Published reviews
- Customer reference lists
- Any special training materials
- Demo disks and scripts

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Home Office Market

Marketing and Sales Information

October 1, 1988

If you are considering developing for the home market segment, the following information about the personal office market may be useful to you. This note provides background information on the personal office market and outlines Apple's focus in 1988 for this segment. The extension of the Apple® Macintosh® family, the introduction of an array of peripherals, and Apple's success in establishing Macintosh as a standard in the business market should provide many development and marketing opportunities for you.

Personal Office Market Overview

The personal office market—defined as those people who work at home as independent businesses, moonlighters, or after-hours corporate workers—is a large, fast-growing market. Last fall, Apple began to actively focus on this market.

The work-at-home market is diverse and diffuse. A large number of home workers are in service-oriented businesses—working as consultants, writers, graphic artists, or designers. Demographic research indicates that they are primarily well-educated, married with children, and have work experience and established career paths.

According to a study conducted by Link Resources, an independent market research firm, the work-at-home market in 1987 was 23 million, with an annual growth rate of 7.5 percent. The study segments the market into independent home businesses (40 percent, or 9 million) and corporate workers (60 percent, or 14 million). Apple's definition of the market reflects the segmentation in this study.

The Link study shows that dollar potential in this segment is attractive; average spending of home businesses on computers is \$2,120. Interestingly, independent business owners working out of their homes spend approximately twice as much as the typical consumer who purchases a home computer—probably because the technology is critical to their earning power and livelihood.

Apple's Market Development Focus

Although it is the smaller of the two work-at-home segments, our initial focus is on the independent home-business worker segment. People who work out of their homes have a greater need for a dedicated business computer, and Macintosh technology directly addresses their computer needs. With Apple's established success in the business market and our current array of business software, we are ideally positioned to sell into the home-business market.

We will work to motivate purchase in this market—specifically, by providing education and building awareness. Advertising and public relations efforts, comarketing, and retail-based programs will form the basis of our marketing push.

We are working on personal office programs at both the field and corporate levels. The objective of these programs is to develop field market awareness of the home-business market, and to develop Macintosh market share in this segment.





Home Office Market

Marketing and Sales Information

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Development Opportunities

Apple is looking for several types of packages for home businesses. The following are the applications most often used in this environment:

- Word processing
- Spreadsheets
- Database management
- Desktop publishing
- Time/Project management
- Financial analysis
- Forms management
- Mailing management

In addition, because of the ease of use and flexibility that the HyperCard® software offers, we anticipate that the personal office market will be taking advantage of HyperCard-based programs in the near future.

Designing Your Product

Products developed for the personal office market segment should exhibit the following characteristics:

- Full use of the Macintosh user interface
- Ease of learning
- Mouse support
- Ability to use MS-DOS information (through data transfer products)
- Ability to interface with complementary products—such as a database with a forms-management program
- Printing capabilities on ImageWriter® LQ and LaserWriter® IISC printers
- Flexibility and room for individuality
- Modem-based information access

What Systems Should You Develop for?

The Macintosh is the computer preferred by home-business owners. The Macintosh Plus is the entry-level machine for both professional home-business workers and those who are just starting their ventures. The Macintosh SE provides additional flexibility in terms of storage and add-on capabilities.

The Apple IIGS® personal computer is the machine for multiple uses at home—for the home worker who has an occasional project to complete away from the office, but primarily wants a computer for the family's educational needs. Apple will continue to look for family/personal finance applications for the Apple IIGS; however, it will focus on the Macintosh for home business.





Home Office Market

Marketing and Sales Information

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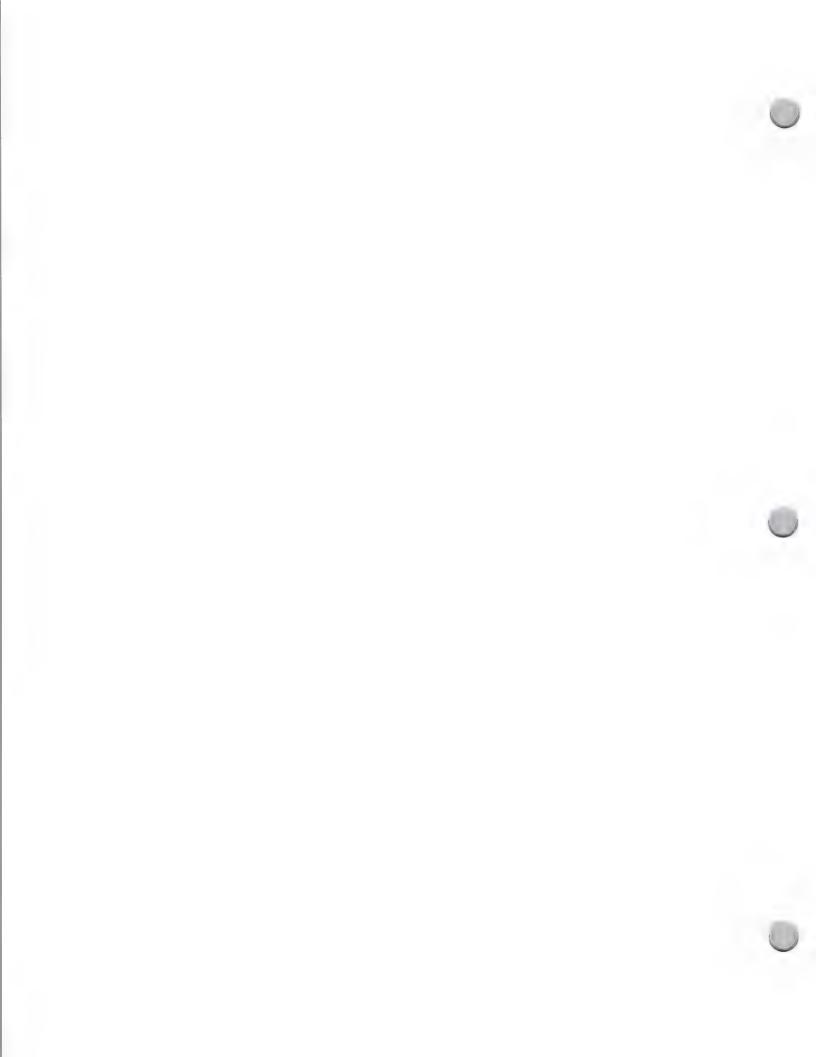
Minimum Hardware Development Configurations

- Macintosh Plus with 20-megabyte hard disk, Apple ImageWriter LQ or LaserWriter IISC printer; Apple PC 5.25 Drive (optional)
- Macintosh SE with 20-megabyte hard disk, Apple ImageWriter LQ or LaserWriter IISC printer; Apple PC 5.25 Drive (optional)
- Macintosh II, Apple ImageWriter LQ or LaserWriter IISC printer; Apple PC 5.25 Drive (optional)
- Apple IIGS (512K minimum), Apple ImageWriter LQ or LaserWriter IISC printer, Apple 3.5
 Drive; Apple 5.25 Drive (optional)

Working with Apple During the Development Cycle

Apple is very interested in knowing what your developmental plans are for this market segment, and we have a genuine interest in your ideas. Please feel free to contact the appropriate person in the Evangelism or Third Party Marketing groups (refer to the Apple Contacts section) for suggestions and opportunities that exist in the personal office market.

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Marketing and Sales Information

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Higher Education Marketing Plans for 1988

Product Focus

The Apple Higher Education group focuses n the use of the Macintosh ™ product family, and the LaserWriter® printer and AppleShare™ file server for academic productivity, desktop publishing and curriculum applications by:

- Students (2.4 million total population)
- Faculty (650,000 total population)
- Administrators (100,000 total population)

In the following areas:

- Teaching
- Learning
- Research
- Productivity

Curriculum solutions for the Macintosh are emphasized in the following areas:

- English Composition
- Engineering (includes mathematics, physics, and chemistry)
- Computer Science
- Business Administration
- Authoring

We make information about third party products available to professors in these disciplines through a series of Curriculum Software Guides, which help faculty to select appropriate software for use in their classes. Curriculum software includes both commercial educational and productivity packages, and highly specialized quasi-commercial software developed by academics, which is available through Kinko's Academic Courseware Exchange. Software is selected for inclusion in the guides based on quality, the opinion of the educational community, appropriate pricing for classroom use, and reliability.

Our product plans also include products and programs to facilitate the integration of the Macintosh into campus networks at several different levels:

- Workgroups (especially classrooms, labs and dormitories)
- Departments
- Campuswide networks
- Administrative Computing Offices



Marketing and Sales Information

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These networks should offer the following features:

- File sharing
- Print serving
- Peripheral sharing (printers, plotters, typesetters, digitizers, and so forth)
- Electronic mail
- · Access to remote data bases, multiuser data bases, and applications
- Access to remote hosts

Marketing Focus

This year, our marketing programs are focusing on Apple's unique partnership with the academic community. We have a long history of strong ties with this academic community, stemming from our belief that personal computers can help people learn in ways that were never before possible. This partnership has resulted in Apple's academic program, which is unmatched in the industry:

- The heart of the program is a product line that was specifically designed with education in mind: the Macintosh family of personal computers and the LaserWriter printer, which give students, faculty, and administrators the tools to teach, learn, and express themselves effectively.
- A strong base of innovative academic software in a variety of disciplines, as well as
 easy-to-use general productivity applications. Apple is committed to making sure schools
 know which solutions fit into which parts of their campus computer plans.
- A network of institutions that can share ideas through Wheels for the Mind, the Academic Courseware Exchange, and the AppleLink® network, and at meetings such as MacAdemiasm, the Macintosh Medical Conference, and Computers in the Liberal Arts. Wheels for the Mind is a quarterly publication produced by Apple in collaboration with Boston College. Wheels is a comprehensive source of information on academic and administrative computing for the Macintosh. Each issue focuses on a specific topic such as multimedia or hypercard and gives updates on courseware development, new products, and details on innovative uses of the Macintosh in the college and university community.
- Support services for campuses such as our University Purchase Program, which offers special price to schools of all sizes, supplemented by the Apple Credit Card program for individual student and faculty purchases, and the Apple Care® service program.

Sales Focus

• Sales are primarily through Apple's direct sales force to 233 direct accounts which are four-year universities and colleges.





Marketing and Sales Information

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• We are expanding to sell to the remaining schools through education dealers, who have special tools, training, and programs available for institutions, as well as individual faculty members and students.

How to Work with the Higher Education and Third Party Marketing Groups

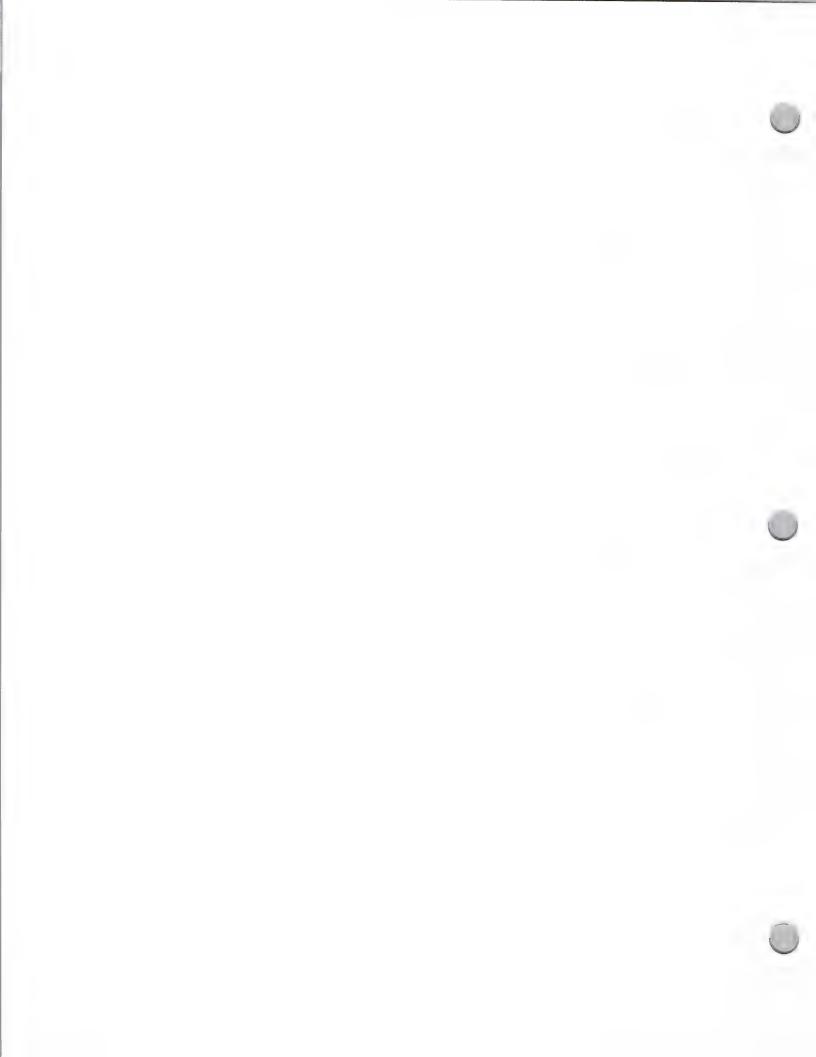
The Higher Education and Third Party Marketing groups ask that you write or correspond by AppleLink if you are interested in comarketing opportunities. Please send product information, including published reviews and references from members of the academic community who have used your product to Third Party Marketing (M/S 36P).

In particular, send to Katie Povejsil (M/S 36L), Academic Solutions manager, the following:

- Full working version of your product in the final package, complete with documentation
- · Marketing materials that explain features and benefits, and offer examples of your product's use
- Published reviews
- Customer reference lists
- · Demo disks and scripts, and any special training materials

The Higher Education and Third Party Marketing groups select products that offer Apple's higher education customers superior functionality and value. These products must also offer solutions in strategic areas, be reasonably priced and of good quality, have superior documentation, and be available on the market.

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Interactive Media Markets Focus

Marketing & Sales Information

October 1, 1988

Our Focus

Interactive Media Markets for Business is a newly formed department at Apple that focuses on the Macintosh® product family as the platform for integrating interactive multimedia (images, audio, video, text) information into new application areas, including the following:

- Interactive presentations
- Interactive courseware
- Interactive job support/job reference tools

Interactive Presentations

The Macintosh makes an ideal presentation and training tool because of its visually interesting display and because of the variety of software programs available that take advantage of that capability. It allows you to incorporate and layer information in the form of visuals, sounds, and text, giving you a more dynamic environment in which to present information.

Interactive Courseware

New authoring and simulation tools allow you to create "real-time" simulations that can incorporate actual information from the business environment. These intuitive, easy-to-use authoring tools make courseware design accessible even to subject-matter experts with little or no computer background. Adding images, animations, sound, and video can provide a multisensory learning experience for your audience.

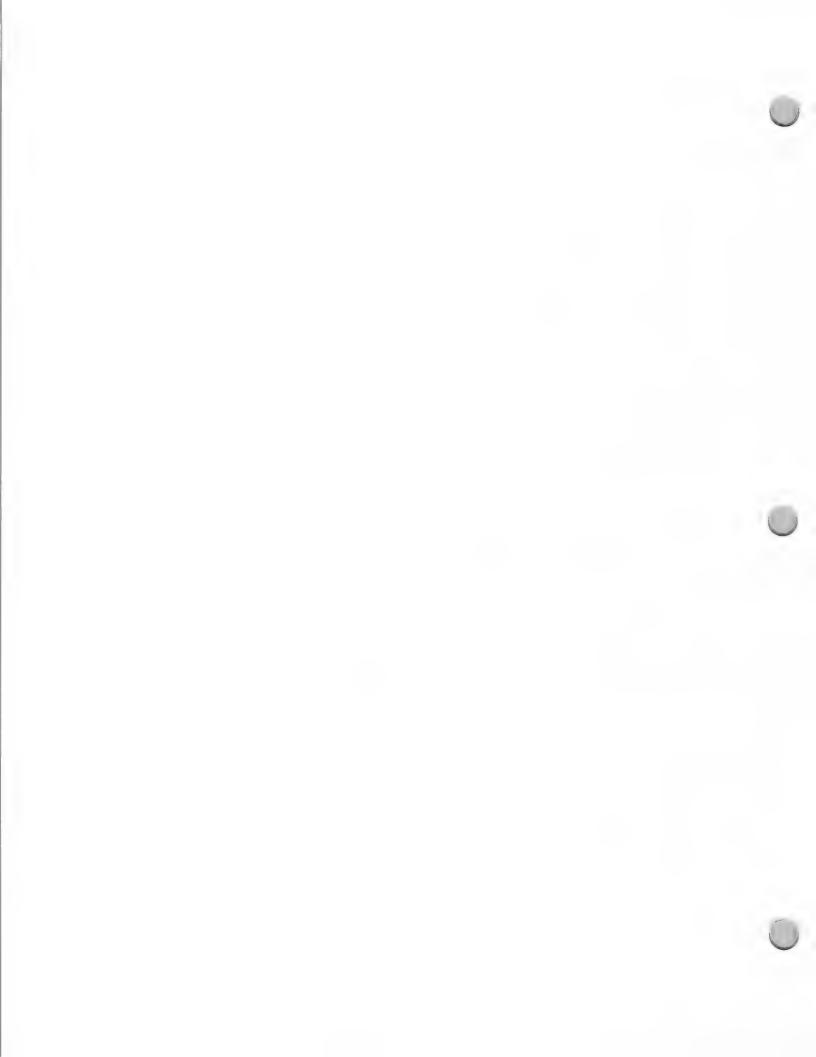
Job Support/Job Reference Tools

The HyperCard® software lets you create and/or customize powerful reference and support applications for specific vertical markets. The Macintosh allows you to access information in a variety of forms—images, text, sound, and even animation—and interweave these elements into a dynamic, interactive environment that can be used either to learn a job or to complete a job.

Emphasis will be placed on the following areas within the business markets:

- Authoring tools
- Interactive presentation tools
- Graphics/Video and imaging solutions
- Voice and audio integration

- CD-ROM applications
- Information retrieval and access
- Courseware/Stack development





Interactive Media Markets Focus

Marketing & Sales Information

October 1, 1988

Market Focus

One of the first expressions of this technology will be in business learning and reference tools, to the packagers of learning materials and job information systems. The efforts will focus on gaining Macintosh presence in the following organizations within corporations and business:

· Sales and Marketing

- Human Resources/Corporate Communications
- · Product Management
- Training departments
- Government
- Service Management

Key application areas will include the following:

- On-the-job knowledge systems
- Job/Employee orientation tools
- Interactive information systems that provide job retraining, product communications, on-the-job operator/skills update and maintenance, customer service, and management skills
- Interactive courseware

Information on other target markets and new applications is forthcoming.

Promotions

The Interactive Media Markets group plans to do the following:

- Attend key influencer association meetings, trade shows, and conferences.
- Support a network of multimedia and courseware developer consultants through Apple User Groups.
- Support publication of Wings for the Mind, a guide to multimedia development tools produced by Third-Party Marketing.
- Conduct programs and seminars that focus on National Account representatives, VARs, and key dealers.
- Support the Apple Business Forums.





Interactive Media Markets Focus

Marketing & Sales Information

October 1, 1988

How to Work with Interactive Media Markets and Third-Party Marketing:

The Interactive Media Markets and Third-Party Marketing groups ask that you write if you are interested in joint marketing opportunities. You should send the following materials:

- A copy of your product (a fully functional version; not a demo)
- Marketing materials showing your product's features and benefits
- Published product reviews
- Customer reference lists
- · Any special training materials
- Demonstration disks and scripts

These materials should be sent to the following address:

Apple Computer Inc. 20525 Mariani Avenue, M/S 36P Cupertino, CA 95014 Attn.: Mary Planding

Apple, the Apple logo, HyperCard, and Macintosh are registered trademarks of Apple Computer, Inc.





K-12 Marketing Focus

Marketing and Sales Information

October 1, 1988

K-12 Marketing Plans for 1988/1989

Product Focus

Apple's K-12 Marketing staff plans to continue to market the Apple® II family for instructional uses. In particular, the Apple IIGS is focused as follows:

• A next-generation workstation with Apple II compatibility, for K-8 students

A powerful workstation for high school students

- A workstation for teachers
- A solution for special niches in K-8 (such as speech therapy)
- A targeted solution tied to curriculum needs

K-12 Marketing plans also call for an effort to gain momentum for the Macintosh™ family in all levels of administration and in certain segments of the high school market by emphasizing its strengths in the following areas:

- Desktop publishing
- Connectivity
- · Powerful productivity packages
- Solutions for business education, vocational education and writing laboratories
- Targeted administrative software
- The unique capabilities of HyperCard™

Market Focus

In the fall, K-12 marketing efforts will focus on the following:

- Penetrating the K-8 classroom with Apple computers and curriculum-based solutions
- Showcasing Macintosh in high school for use in the following curriculum areas: business education, vocational education, journalism and writing
- · Highlighting the Macintosh as an administrative tool
- Supporting the AppleTalk network for education
- Fostering partnerships for leadership in education technology

How to Work with Third Party Marketing

Third Party Marketing asks that you write if you are interested in joint marketing opportunities. Please send a written proposal to Mary Planding, Third Party Marketing, Apple Computer Inc., 20525 Mariani Avenue, M/S 36P, Cupertino, CA 95014 including the following:

- Full working product
- · Marketing materials that explain features and benefits, and offer examples of the product's use
- Published reviews
- · Customer reference lists
- Any special training materials
- Demo disks and scripts





K-12 Marketing Focus

Marketing and Sales Information

October 1, 1988

The primary interest of Third Party Marketing is to deal with publishers, not developers. Your product must be on the market and have an established form of distribution.

Funding is not available for software development from the K-12 Marketing Group. If you want Apple to preview your product(s) in the context of Apple's marketing plans, a written proposal should be submitted to Mary Planding in Third Party Marketing (M/S 36P).

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Special Education & Rehabilitation Focus

Marketing and Sales Information

October 1, 1988

What is the special education and rehabilitation market?

If you think of the disabled community as a small group of people who don't constitute a significant market for computer products, you may be missing a market opportunity for your educational products. Nearly 37.3 million people, or 15 percent to 20 percent of the U.S. population, are either physically or mentally disabled.

In the K-12 education market alone, there are 4.4 million students with disabilities. The special education segment accounts for roughly 15 percent of total computer sales to schools. And as parents, teachers, and local and state government officials become more aware of the positive effects of computers in this market, computers will become more prevalent.

How do computers help disabled people?

Computers, by themselves, present just as many obstacles as other tools that are not specifically designed for disabled users. But when the computer is adapted to fit the needs of a disabled person, it becomes a valuable tool for learning, working, playing, and communicating. Hundreds of third-party products—both hardware and software— are available today to adapt the computer's capabilities to meet the needs of disabled individuals.

For those with visual impairments, there are adaptors that offer speech capability and others that enlarge characters on the screen. For the hearing-impaired individual, there are programs that teach American Sign Language and programs that help fine-tune speech patterns. For individuals who can't move their arms or legs—but who can wiggle their nose, or eyebrow, or big toe—there are a variety of different switches that, in combination with appropriate software, enable access to the computer. There are expanded keyboards for individuals who lack the fine motor skills necessary to use a standard computer keyboard, and message programs that will print out a whole word or phrase...just by pressing one key. Environmental control systems allow the computer user to turn on a light—or turn off the radio—while sitting at the computer.

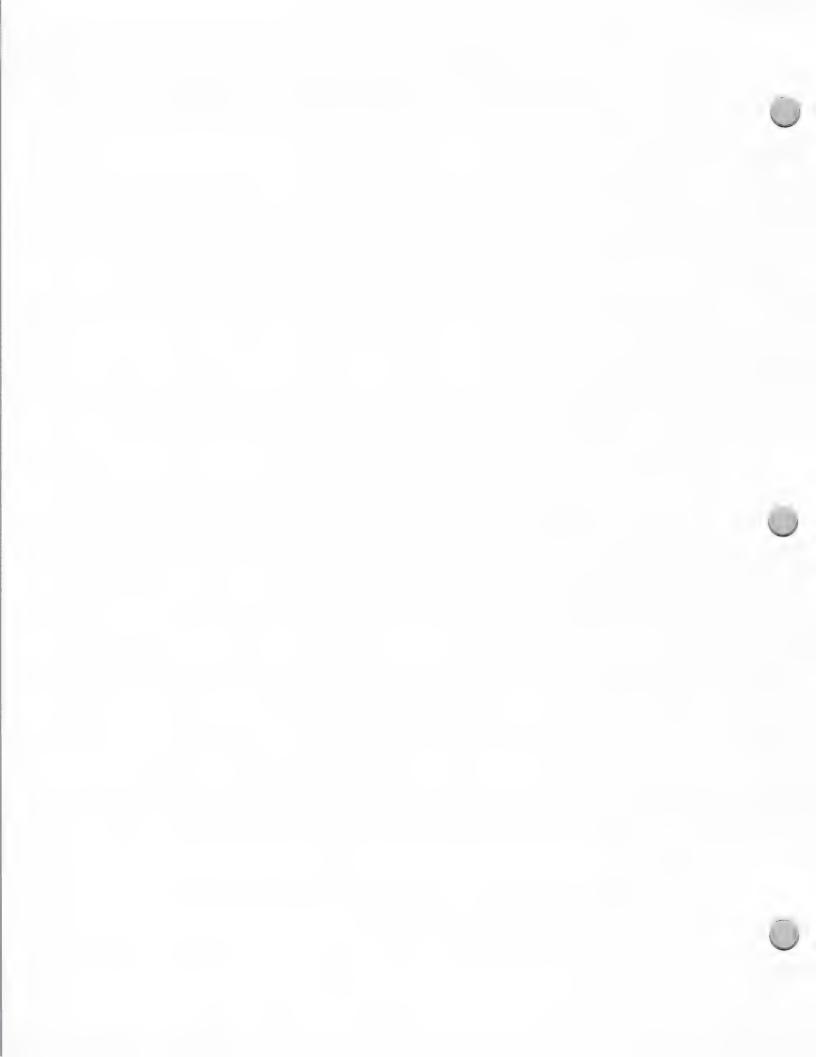
Because of Apple's strong position in the schools, there are more adaptive devices and specialized software for Apple® computers than for any other computer. However, there is a need for special education products that serve as tools for individuals with visual and hearing impairments, speech disorders, learning disabilities, emotional disturbances, and physical handicaps.

What is Apple's Office of Special Education doing?

Apple's Office of Special Education was established in July 1985 to address the needs of the disabled community. It consists of a dedicated group of individuals within Apple's Education Marketing Department, whose job is to ensure that teachers, developers, administrators, parents and disabled consumers are aware of the broad range of solutions that exists, and to demonstrate how easy it is to utilize these various solutions at home and in school.

Resources

The following are resources that the Office of Special Education has designed to accelerate the adoption of computers into the lives of disabled individuals:





Special Education & Rehabilitation Focus

Marketing and Sales Information

October 1, 1988

Solutions database

Solutions is a data base, accessible through the AppleLink® information and communications network, of information on third-party products and resources that customize Apple computers to the needs of disabled children and adults. With more than 1,000 software and hardware products, the Solutions data base is an important information and marketing tool for all special education developers and educators who have access to AppleLink. The Solutions data base provides a second-to-none capacity to identify the sources of specialized software and adaptive peripherals, as well as support organizations and publications.

Resource Guide

The Solutions data base is also available in a hard-copy version. It's called Apple Computer Resources in Special Education and Rehabilitation. Produced by Apple's Office of Special Education and published by DLM, Inc., this one volume guide contains descriptions of more that 1,200 hardware and software products, organizations, and publications that support disabled computer users. It is available for \$19.95 from DLM, Inc. P.O. Box 4000, Allen, TX 75002. They can also be reached at 800-527-4747 (National), or 800-442-4711 (Texas).

SpecialNet Bulletin Board

SpecialNet is a nationwide telecommunications system with over 40 different bulletin boards. Here, users have the opportunity to discuss important special education issues. It is also possible to access the *Solutions* data base using the SpecialNet system. Apple maintains a 24-hour-a-day electronic drop-in center for special education teachers and administrators nationwide, and it is considered the most active of the many different bulletin boards on the system. Every State Department of Education subscribes to SpecialNet. You can get more information about SpecialNet by writing to:

National Systems Management, Inc. 2021 K Street N.W., Suite 315 Washington, D.C. 20006 (202) 296-1800

Apple's Office of Special Education is here to assist you. As a developer, you are our partner in special education, and we welcome your calls, letters, or AppleLink messages. Please be sure to send us your new product information, so that we can include it in our Solutions data base and the book Apple Computer Resources in Special Education and Rehabilitation. And of course, always feel free to contact us:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 36M Cupertino, CA 95014 The Office of Special Education (408) 973-2732 AppleLink: SPECIAL.ED

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Special Education & Rehabilitation Resources

Marketing and Sales Information

October 1, 1988

The market for computer products in the special education area is quite substantial—and growing even larger. Here are some important things you need to know in order to address this segment of the education market.

Since the special education market is still fairly new, developers have many questions about it, including: How do I find out what special education products currently exist for the MacintoshTM personal computer? How do I market my product so that key resources know about it? Where can I get advice about how to develop a product for a disabled computer user?

There are several organizations that are specifically designed to address the needs of the special education market, as well as organizations whose primary concern is in the computer's role in helping the disabled individual. From marketing information to community involvement for developers, these organizations may be very helpful to you.

Marketing Information

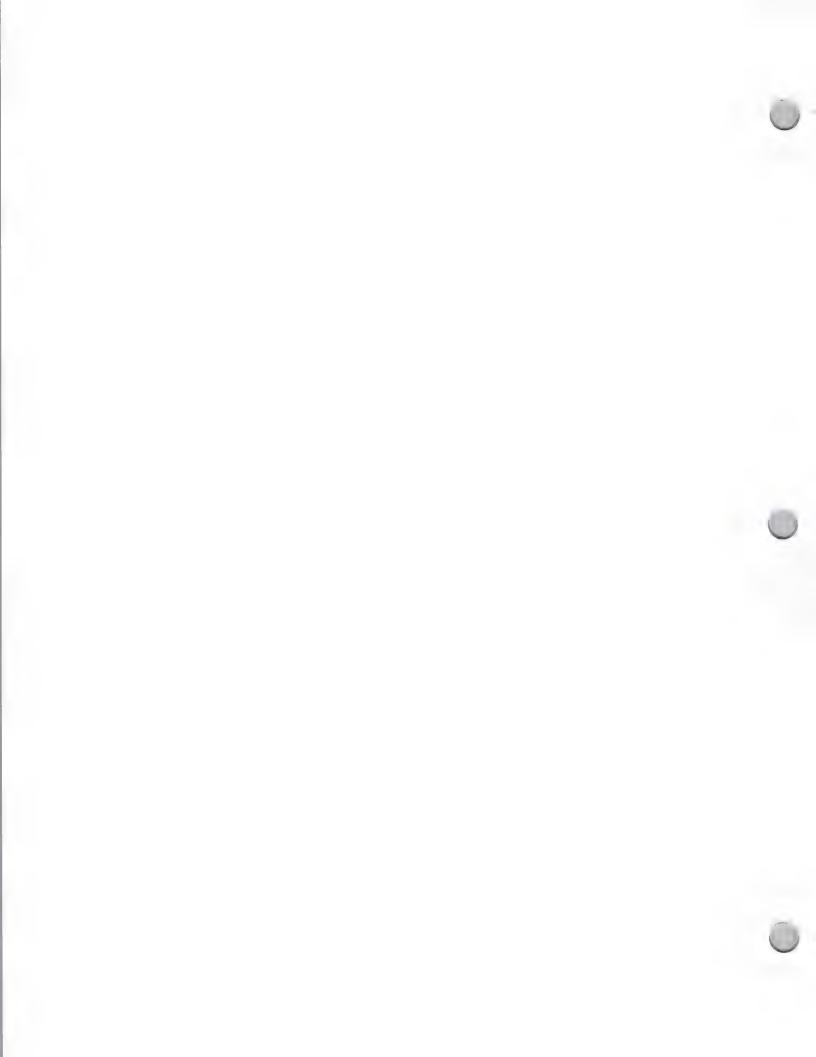
Two organizations that specialize in providing marketing-related answers are listed below. Both have proved helpful to special education developers in the past, and both are constantly compiling vast amounts of useful information, which they will be glad to make available to you. Apple works closely with both organizations and encourages you to contact them.

Closing the Gap, Inc. is an internationally respected organization that publishes the most comprehensive newsletter in the field of disability and technology. The newsletter contains valuable information for individuals concerned with new developments in this field. In addition, Closing the Gap, Inc. conducts an annual conference in which many vendors participate. This conference takes place each October in Minneapolis. For more information about Closing the Gap, Inc. you may contact them at the address below:

Closing the Gap, Inc. P.O. Box 68 Henderson, MN 56044 (612) 248-3294

The Trace Research and Development Center is widely recognized as a force that acts to ensure that computer technology is designed to be accessible to all disabled individuals. While the Trace Research and Development Center has many areas of specialization, it is particularly responsive to individuals seeking ways to tailor computers to meet the needs of disabled children. You may contact them at the following address:

Trace Research and Development Center S-151 Waisman Center 1500 Highland Avenue Madison, WI 53705 (608) 262-6966





Special Education & Rehabilitation Resources

Marketing and Sales Information

October 1, 1988

Community Involvement

The National Special Education Alliance—a partnership initiated by Apple—consists of grass-roots community organizations, third-party vendors, and professional associations. The purpose of the Alliance is summarized in its Mission Statement: "To increase awareness, understanding, and implementation of micocomputer technology to aid disabled individuals." The 15 charter member resource centers work closely with hardware and software developers to conduct training workshops and product fairs, and to provide valuable community connections and resources. Each will be glad to help you with your questions. Apple plans to establish centers in every state by the end of 1988.

Following is a list of the current member resource centers. Please contact these organizations for additional information about their individual developer-related programs.

Children's Resource Center

1056 East 19th Avenue Denver, CO 80218-1088 (303) 861-6633 AppleLink: X0649 Ann Grady Patricia Kenyon

Computer Access Center 2425-16th Street, Room 23 Santa Monica, CA 90405 (213) 450-8827 AppleLink: X0390 Donna Dutton Sandi Burnett

Computer CITE
Valencia Community College
215 E. New Hampshire
Orlando, FL 32084
(305) 299-5000 ext 3291
AppleLink: X0648
Carol Cohen
Michael Guilty
Marthe McGregor

Nevada Computer & Technology Center for the Disabled (temporary mailing address) Communication Assistance Resource Service 3201 Marshall Road Kettering, OH 45429 (513) 298-0803 AppleLink: X0645 Terry Trzaska

The Disabled Children's Computer Group
2095 Rose Street
Berkeley, CA 94709
(415) 841-3224
AppleLink: X0115
Alice Wershing
Jaquelyn Brand

Pat Cashdollar

Massachussets Special Technology Access Center 183 Lake Avenue Newton, MA 02159 (617) 969) 4279 Kathy Higgins

Pacer Center, Inc. 4826 Chicago Ave., South Minneapolis, MN 55417-1055 (612) 827-2966





Special Education & Rehabilitation Resources

Marketing and Sales Information

October 1, 1988

5759 Hedgehaven Court Las Vegas, NV 89120 (702) 382-3358 AppleLink: X0644 Kay Lesher Ron Johnson AppleLink: X0467 Dan Berks Polly Edmunds

Regional Disabled Children's Group for Retarded Citizens 1146 South 3rd Street Louisville, KY 40203 (502) 584-1239 AppleLink: X0654 April Kerr Carolyn Keelan Special Technology Center 535 Race Street, Suite 220 San Jose, CA 95126 (408) 288-5010 Lisa Cohn

SpecialLink
2512 Canterbury Avenue
Cincinnati, OH 45212
(513) 531-9233
Elaine Hackett

SuperGroup/Computer Evaluation Research Center of Louisiana 4129 Beaujolais Kenner, LA 70065 (504) 561-8713 Melanie Ferrand

Technology Resouces for Special People Salina Technology Coalition 3023 Canterbury Salina, KS 67401 (913) 827-0301 AppleLink: X6046 Dawn Merriman Technical Aids and Assistance for The Disabled 1950 W. Roosevelt Road Chicago, IL 60608 (312) 421-3373 AppleLink: X0651 Ruth Lehman Margaret Pfrommer

West Tennesee Special Technology Resource Center for the Disabled Jackson/Madison County Library Route 4, 433 East LaFayette Jackson, TN 38301 (901) 423-9058 Margaret Doumitt





Adult Literacy Market

Marketing and Sales Information

May 1, 1988

What Is the Adult Literacy Market?

Jonathan Kozol, the author of *Illiterate America*, estimates that in 1985 some 25 million people in the United States could not read the labels on the things they bought. Another 35 million were functionally illiterate—unable to function in America's print-oriented culture without help. And some two million illiterates are added to this tremendous pool every year. By a conservative estimate, one of four adults in America is functionally illiterate.

The problem begins in the U.S. public schools. For instance, of the 39,500 students forming the Class of 1984 in one of the largest school districts in America, 21,000 failed to complete high school. At least one of every three students in America become dropouts, largely because they are unable to read and comprehend printed materials.

The problem is enormous, and the American public is finally becoming aware of it. The Ad Council, a professional association of advertising agencies, reports that as a result of recent media attention, citizens' awareness of functional illiteracy has grown from 21 percent to 30 percent in one year. Many states have started campaigns to deal with the problem. Charles Blaschke, president of Education TURNKEY Systems, estimates that over \$5 billion is spent annually on literacy campaigns.

How Can Computers Help Adults to Become More Literate?

Many high quality instructional reading programs, at different levels, are available for children. Unfortunately, that isn't the case for adolescent and adult students. Software solutions are critically needed for the adolescent and adult market; the time is right for identifying and developing creative and effective instructional software for this market. Solutions are needed at the beginning reading level (0–3rd grade), the intermediate level (4th–6th grade), and the advanced or technical literacy level (7th grade and up). It is important that solutions in any of these areas be appropriate for the targeted audience and not appear to be written for young children.

Another important market is the area of ESL (English as a Second Language): many people who come to the United States from foreign countries are literate in their own language, but are functionally illiterate in the English language. This is a problem in public schools and in the workplace; appropriate software solutions are needed at every reading level.

What Is Apple's Adult Education and Literacy Group Doing?

Apple's Adult Education and Literacy Group was established in November 1987 to address the problem of illiteracy. The group consists of dedicated educators within Apple's new Strategic Sales and Marketing Group whose job it is to identify and support the development of literacy solutions. We are currently establishing a LITLINK Communications Network with the Institute for the Study of Adult Literacy at Pennsylvania State. The Institute is sponsored by the Gannett Foundation and is considered the leader in supporting the use of technology in literacy programs. We are anxious to serve as the catalyst for the developer community in the delivery of creative and effective solutions for adolescent and adult literacy. Our goal is to assist developers in making contact with key literacy





Adult Literacy Market

Marketing and Sales Information

May 1, 1988

providers, and to help them bring products to the marketplace in a timely fashion. We also plan to foster partnerships between developers, providers, and businesses so each will be able to make the impact that is needed.

Minimum Hardware Development Configurations

- Macintosh Plus CPU Apple 20MB SCSI Hard Disk
- Macintosh SE HD 20

 Macintosh II CPU Monitor Apple IIGS CPU (512K Minimum)
 Color or black and white monitor
 3 1/2" disk drive
 5 1/4" disk drive (optional)

Please contact the Adult Education and Literacy Group at Apple Computer if you are interested in developing a solution in this new market to help adolescents and adults get a second chance at learning. Please call, write, or AppleLink® the address below for more information.

Adult Education and Literacy Group Apple Computer, Inc. 20525 Mariani Avenue, M/S 36AB Cupertino, CA 95014 (408) 973-4268 AppleLink: Kelley1





Vertical Market Directory

Marketing and Sales Information

February 1, 1988

The Apple Vertical Market Business Directory is a semiannual publication produced by Third Party Marketing and published by Redgate Communications Corporation. Its purpose is to inform businesses nationwide of the powerful vertical-market solutions available on the MacintoshTM personal computer, and to assist them in the selection of appropriate products. The directory lists available solutions, but in no way recommends or endorses specific products.

The directory is distributed at Apple trade shows and business forums, and sent to Apple dealers, VAR, National Account and Government customers, and Apple sales representatives—an audience of thousands of business users.

Content

The directory consists of listings of applications that have been designed for specific kinds of businesses, such as medical or legal applications. It includes the following information:

- Product name
- Vertical market category
- Specific industry category
- · Product description
- · Company name, address, and phone number
- System requirements
- Price
- Support/training available

Participation requirements

The primary requirement is that your product address a specific vertical market or niche, such as the real estate market. Products that are not specialized—generic applications that can be utilized by most or all businesses, such as word processors—cannot be accepted. Apple also requires that your product(s) meet the following criteria:

- A commercial version must be currently shipping
- Support and training must be provided

You must also supply a list of three businesses currently using the product(s). Apple and Apple's publisher will keep this information strictly confidential.

The next step

The third edition is scheduled to be distributed in fall 1988. Approximately three months prior to the printing of the next edition, you will automatically receive a product questionnaire. If you feel your product(s) qualify to be included, please complete and return it. If you do not receive a questionnaire, please send a request on your company letterhead to the following address:



Vertical Market Directory

Marketing and Sales Information

February 1, 1988

Apple Computer, Inc. 20525 Mariani Avenue, M/S 36-AA Cupertino, CA 95014 Attn.: Cindy Cain Third Party Publications Manager

Telephone: (408) 973-6835

Once your questionnaire is reviewed, if your product is found to be appropriate for the directory, you will be asked to provide the required information regarding it and your company. If you have any questions, contact Cindy Cain at the address above.

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Eng/Sci Solutions Guide

Marketing and Sales Information

May 1, 1988

Engineering/Scientific Solutions Guide

The Apple Engineering/Scientific Solutions Guide is a semiannual publication produced by the Third-Party Marketing and Technical Markets Programs groups at Apple. It was developed to provide a comprehensive listing and description of all Macintosh® solutions available for the engineering and scientific industries. It also assists users in finding the correct solution for their needs. The guide lists and describes available solutions, but does not recommend or endorse specific products.

The directory is distributed to Apple groups such as the field sales force and the Engineering and Advanced Technology Group, authorized Apple dealers, and Apple customers, including Apple's business accounts and government and international sales representatives. In addition, it is distributed at trade shows that reach end users in the business, government, international, and technical markets.

Content

The guide lists solutions by industry segment and by application within the industry. The industry segment categories are as follows:

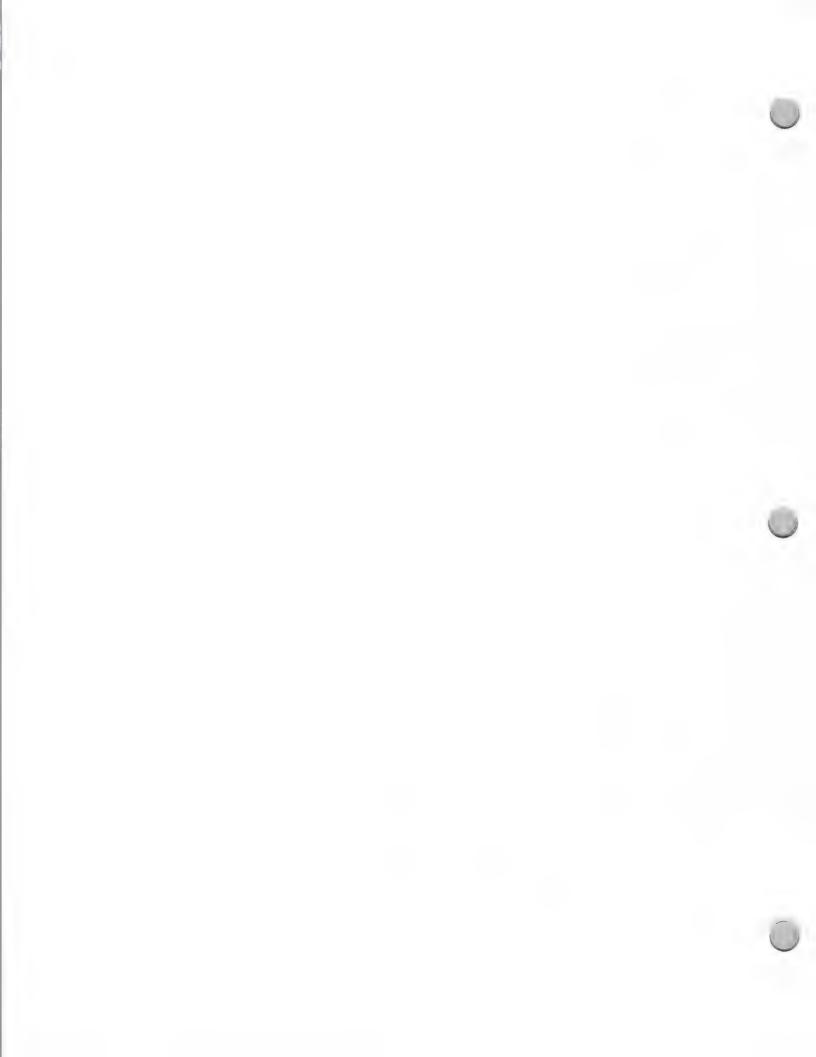
- Architecture, engineering, and construction
- Mechanical
- Electrical
- Manufacturing, planning, and control
- Mapping/Earth resources
- Scientific/Laboratory
- Software development
- Technical productivity
- Education
- Other (utilities/textile design)
- System components

Each listing includes the product name and description, industry segment, application (such as drafting or design), pricing, system requirements, available support, and company information.

Participation Requirements

To be included in the guide, your product must address an industry segment or application that was identified in the content section. The only exception to this rule is general-purpose productivity tools, which will be considered for inclusion if they provide real benefits to a technical user. We also require that your product(s) meet the following criteria:

- A commercial version must be currently shipping
- Support and training must be provided





Eng/Sci Solutions Guide

Marketing and Sales Information

May 1, 1988

Finally, you must supply a list of three businesses currently using your product(s). Apple will keep this information confidential.

The third edition of the Engineering/Scientific Solutions Guide is scheduled to come out in the fall of 1988. Approximately three months prior to the printing of the next edition, you should automatically receive a product questionnaire. If you feel that your products(s) qualify for inclusion, please complete and return the questionnaire. If you do not receive a questionnaire, please send a request on your company letterhead to:

Third Party Marketing
Apple Computer, Inc.
20525 Mariani Avenue, M/S 36AA
Cupertino, CA 95014
Attn: Cindy Cain
AppleLink®: Cain2

Once your questionnaire is reviewed, if your product is found to be appropriate for the directory, you will be asked to provide information about your product and company. If you have any questions, contact Cindy Cain.

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Music Products Guide

Marketing and Sales Information

October 1, 1988

The Apple Music Products Guide includes third-party Macintosh® and Apple IIGS® software and hardware music solutions. The guide was created by the Music Marketing group at Apple Computer and Redgate Communications Corporation to provide a listing of music solutions available for Apple IIGS and Macintosh computers. The guide lists and describes music solutions; however, mention in the guide does not constitute endorsement or recommendation of the products.

The guide was originally distributed to more than 400 authorized Apple dealers as part of the Music Market Demo Kit program. Each participating dealer received several copies of the guide to give to customers or retain as a reference guide.

A revision to the catalog is planned for winter 1988. The revision will split the guide into two: one for Macintosh products and the other for Apple IIGS products. The new guides will be included in the dealer price list. They will also be given out at major music trade shows in which Apple participates, such as the biannual National Association of Music Merchants trade show.

Content

The guide is organized into the following categories: Sound Editor/Librarians, Music Notation and Publishing, Sequencing, Education, Creativity, Composition, Studio Software, and Hardware. Solutions are then listed under the appropriate category. Each listing includes the following information:

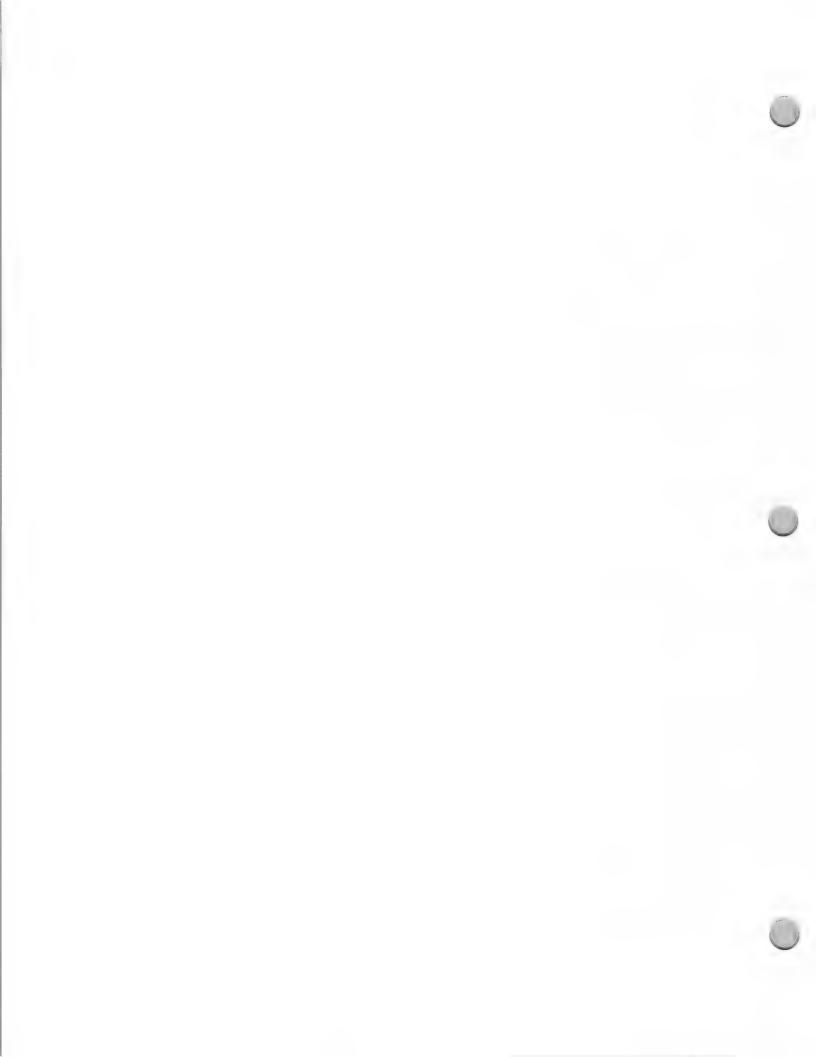
- · Product name
- Product description
- Company name, address, and phone number
- System requirements
- Price
- Support
- Whether or not it uses MIDI

Participating in the Apple Music Products Guide

If you have a product that you would like to be considered for inclusion in the winter 1988 edition of the *Apple Music Products Guide*, you should contact the Music Marketing group. You will be asked to fill out a product information sheet on each of your music products and send your products to them for evaluation. If you have any questions concerning the guide, or want to be included, contact:

Music Marketing Apple Computer, Inc. 20525 Mariani Avenue, M/S 36J Cupertino, CA 95014 (408) 973-4533 AppleLink®: X1233

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Marketing and Sales Information

October 1, 1988

What are the Curriculum Software and Education Solutions guides?

The Apple K–12 Curriculum Software Reference Guides and Education Solution Guides provide information to help educators integrate educational software into their teaching. The guides contain alphabetical listings and descriptions of software that works with both Apple® II and Macintosh™ personal computers.

Apple Curriculum Software Guides and Education Solutions Guides

The Curriculum Software Guides address basic skills areas such as science, math, language arts, and social studies. In these guides, highly rated software is mapped to curriculum elements in a Curriculum Skills Matrix. This allows educators to locate software that meets specific curriculum objectives without having to read through hundreds of software descriptions.

The Education Solutions Guides deal with specialized subjects such as foreign languages, English as a second language, and business education. They also provide feature by feature comparisons of different Apple compatible software titles and a section filled with classroom activity suggestions.

Both types of guides contains product descriptions that are arranged alphabetically by title and highlight essential product information. A Publisher Information section, which groups software by publisher, offers important buyer information.

The Curriculum Software Reference Guides and Education Solutions Guides are available to Apple's education customers through the Apple Education Price List. Currently, Curriculum Software Guides are available for science, reading, writing, language arts, and mathematics. A social studies guide is slated for production in the fall of 1988.

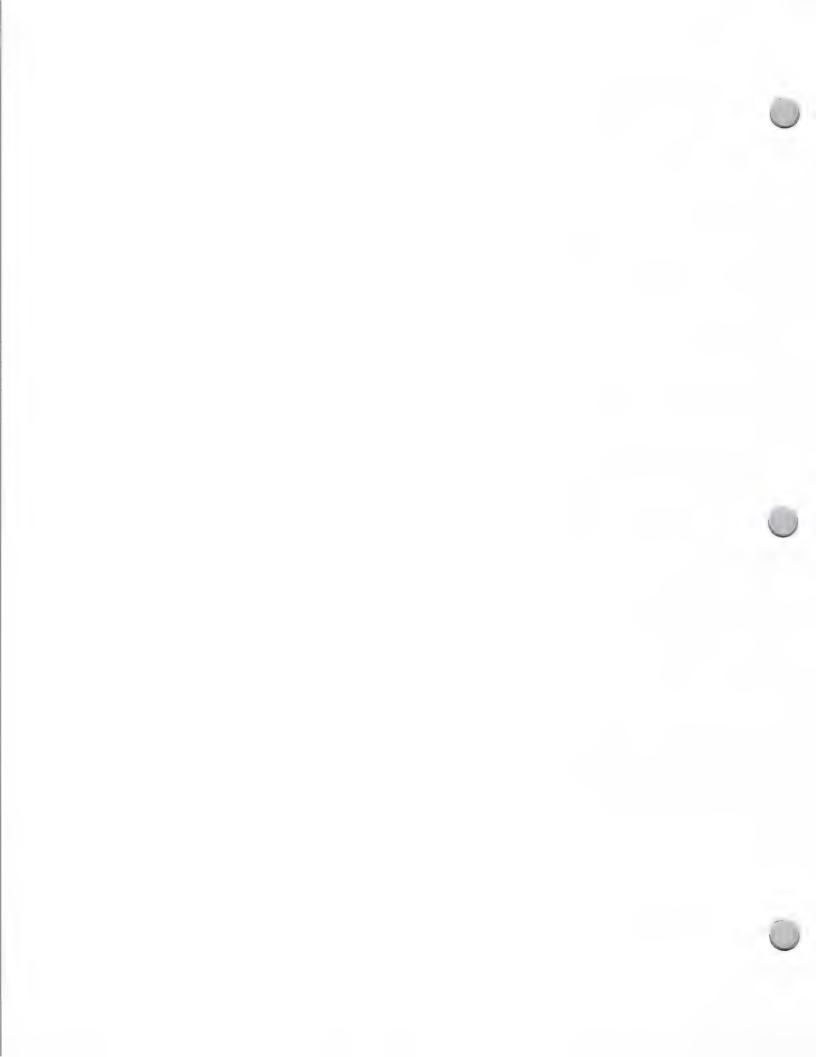
Education Solutions Guides are available for foreign languages and English as a second language. An Education Solutions Guide for business education is slated for the fall of 1988.

How is software chosen for inclusion in the guides?

Programs that have received ratings of desirable or better in two or more national educational software review sources are included in the guides. The review sources consulted are provided by state and nonprofit agencies, and include the California Technology in the Curriculum (TIC) Guides, The 1986 Educational Software Review Guide, MicroSIFT, EPIE, the Alberta Computer Courseware Evaluations, and the Minnesota Department of Education High-Quality Courseware List. In addition, a committee of experts in educational software review newer software titles (those not yet included in the review sources).

What can I do to promote my software for inclusion in Apple's guides?

If you have software that you feel would be appropriate in the area of Science, Language Arts, Mathematics, English as a Second Language, Social Studies, Foreign Languages, Business Education, Vocational Education, or Administration, please send a letter and product information to the following address:





Marketing and Sales Information

October 1, 1988

Apple Computer, Inc. 20525 Mariani Avenue, M/S 36M Cupertino, CA 95014 Attn: Curriculum Guide Series

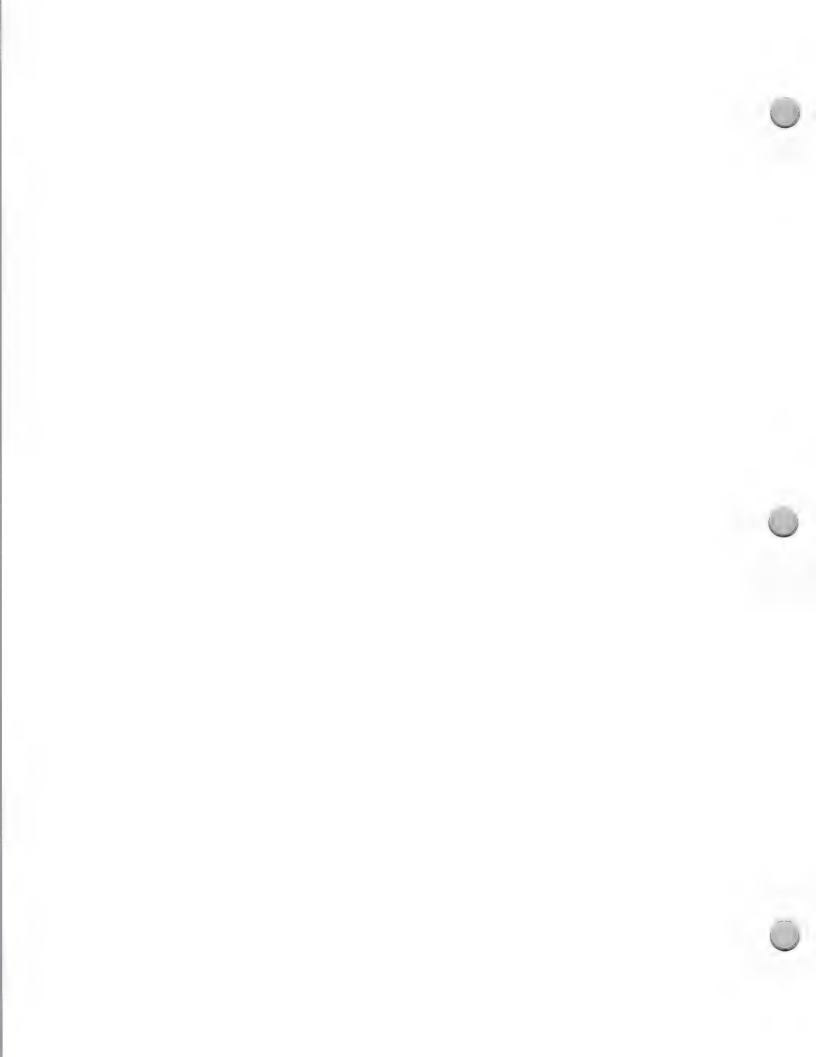
You will be notified if we would like you to submit a software package for review.

How can developers order the Curriculum Software Reference Guides and Education Solution Guides?

As a certified Apple developer, you may purchase the guides on a Developer Programs order form. The following are the product numbers and prices for each of the available guides. Since the guides do not appear on the Developer Programs Price List, please refer to this page when ordering.

Curriculum Software Guide	Part Number	Price
Curriculum Software Reference Guide—Science	A2G0024	\$20
K-6 Curriculum Software Reference Guide— Reading, Writing, and Language Arts	A2G0025	\$20
6–12 Curriculum Software Reference Guide— Reading, Writing, and Language Arts	A2G0026	\$20
K-6 Curriculum Software Reference Guide— Mathematics	A2G0027	\$20
6–12 Curriculum Software Reference Guide— Mathematics	A2G0028	\$20
K-12 Curriculum Software Reference Guide — Social Studies	A7F0060	\$20
Education Solutions Guides		
Education Solutions Guide — English as a Second Language	A7F0052	\$14
Education Solutions Guide — Foreign Language	A7F0096	\$14
Education Solutions Guide — Business Education	M1139	\$14

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Sales Technical Support

Marketing and Sales Information

February 1, 1988

There are many groups at Apple, so it can sometimes be hard to determine who needs to know about your product. When you're making your lists of key groups, one group you will want to include is Apple's Technical Communications group. Technical Communications is responsible for maintaining the technical expertise of the field engineers System Engineers (SEs) and Technical Support Engineers (TSEs). This group procures most of the hardware and software used by the field engineering people. They are responsible for selecting and recommending software and peripherals to be used by Apple's sales representatives, in selling Apple products to new and existing customers. They can serve as an effective way to get exposure for your products.

Why are Technical Communications and Apple Field Engineers so important? First of all, they are the technical experts who give support to Apple's Retail and Direct sales force, and to Apple customers, including Apple's retail, higher education, national accounts, government, VAR, and K-12 sales representatives, and authorized Apple dealers, VARs, Government, National Account and Education customers.

Apple's sales force looks to the system engineers to make thorough product evaluations and selections and the field engineers, in turn, look to Technical Communications at corporate for the software and hardware that they need to provide solutions to the customer. They have the technical knowledge needed to understand Apple and third-party products, and the professional skills needed to show products in the best light. As a result, they are key contributors when it comes time to demonstrate third-party or Apple products to Apple's key customers. For example, SEs frequently help to decide which products will be presented as part of a solution sale.

Technical Communications also evaluate new products. They make this information available to Apple employees through an internal Apple test group that reviews third party hardware and software products, and in databases compiled and maintained in AppleLink libraries.

In addition, Technical Communications and field engineers make outstanding beta testers for your products. They file accurate, descriptive bug reports, and they are keenly aware of programming and compatibility issues.

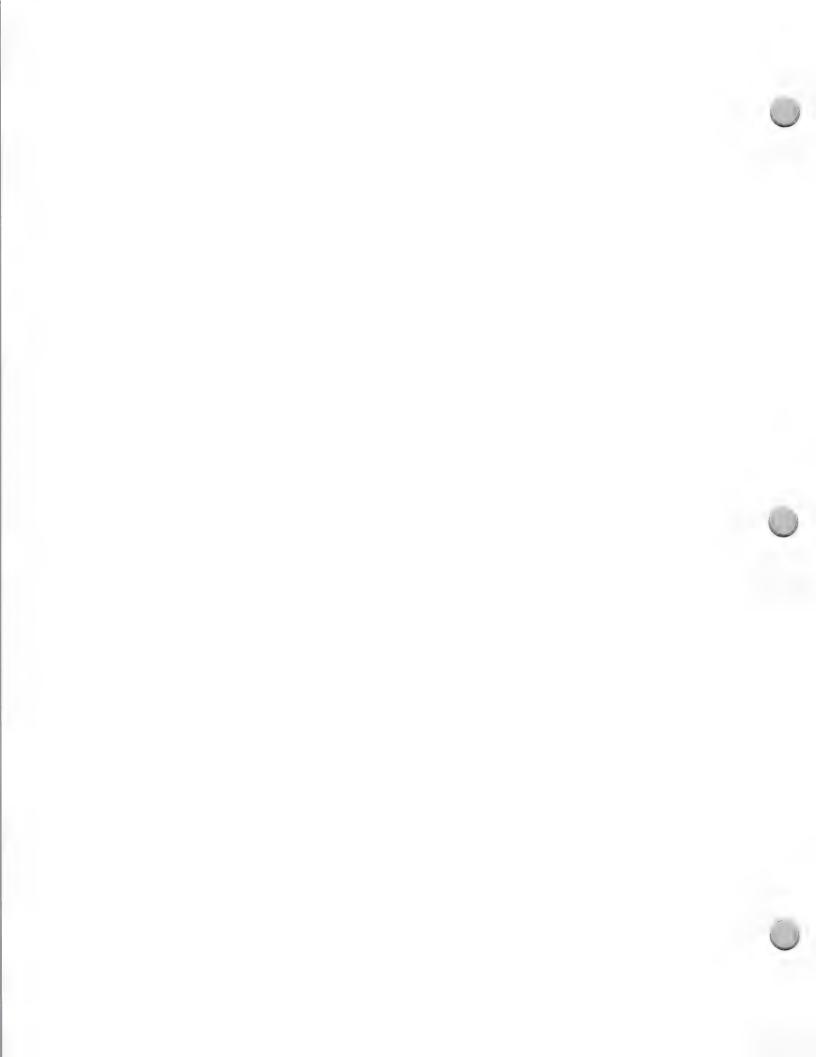
Technical Communications is interested in evaluating a wide range of products that fit Apple's marketing strategies and show Apple's hardware off in the business, consumer, K-12, higher education and government markets. They would like to evaluate business applications and productivity tools, languages and compilers, data communications software and protocol converters (in particular ones that connect DEC, IBM, and Apple systems together), systems utilities, and products that use the MIDI interface.

Technical Communications is very interested in hearing from you about your products. So, if you want an avenue that can help to let Apple field system engineers know about your product(s), or you want information about beta testing your product, please contact Scott Converse in Technical Communications at (408) 973-6656 or at the following address.

Apple Computer, Inc. 20525 Mariani Avenue, M/S 37-O Cupertino, CA 95014 Attn: Product Evaluation

AppleLink address: CONVERSE1

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Apple University Consortium

Marketing and Sales Information

February 1, 1987

Apple does business with hundreds of colleges and universities in the U.S. and overseas. While this list of customers is not available to anyone outside Apple, we do publish the list of our 32 Apple University Consortium Schools (AUC) and information on the Higher Education Purchase Program (HEPP). Unfortunately, we cannot provide you with an address or a contact person, but you are welcome to contact these schools on your own. For inforatin on how to mail to APple AUC and other higher education campuses, please see the focus note called "Higher Education Mailings" in this section.

The AUC schools listed below are leaders in adopting Macintosh™ technology in higher education. Among our AUC schools, Macintosh has a little more than 40 percent market share on campus.

> Boston College—Chestnut Hill, Massachusetts Brigham Young University—Provo, Utah

Brown University—Providence, Rhode Island

Carnegie-Mellon University—Pittsburgh, Pennsylvania

City University of New York—New York City, New York

Columbia University—New York City, New York

Cornell Medical College—New York City, New York

Cornell University—Ithaca, New York

Dartmouth College—Hanover, New Hampshire

Drake University—Des Moines, Iowa Drexel University—Philadelphia, Pennsylvania

Duke University—Durham, North Carolina

Emory University—Atlanta, Georgia

Franklin & Marshall College—Lancaster, Pennsylvania

Harvard University—Cambridge, Massachusetts

Massachusetts Institute of Technology—Cambridge, Massachusetts

Northwestern University—Evanston, Illinois

Princeton University-Princeton, New Jersey

Reed College—Portland, Oregon

Rice University—Houston, Texas

Stanford University—Stanford, California

University of California at Berkeley—Berkeley, California

University of Chicago—Chicago, Illinois

University of Illinois—Urbana, Illinois

University of Michigan—Ann Arbor, Michigan

University of Notre Dame—Notre Dame, Indiana

University of Pennsylvania—Philadelphia, Pennsylvania

University of Rochester—Rochester, New York

University of Utah—Salt Lake City, Utah

University of Washington—Seattle, Washington

University of Texas-Austin—Austin, Texas

Yale University—New Haven, Connecticut





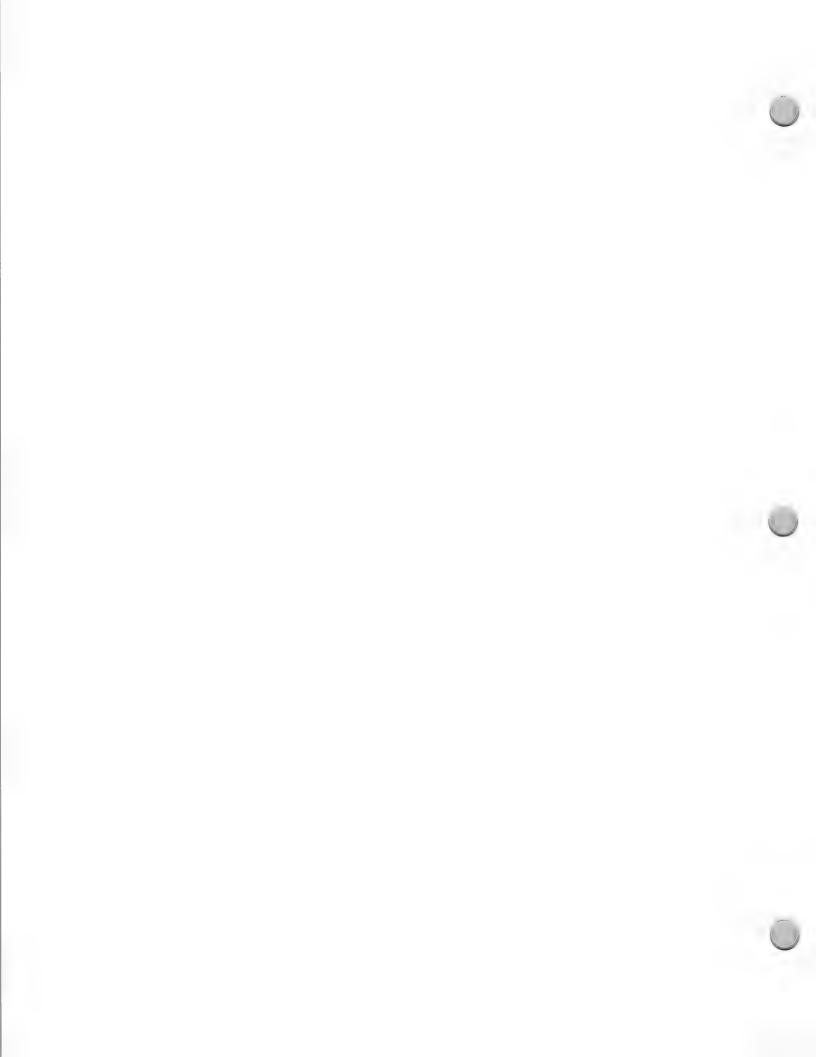
Marketing and Sales Information

February 1, 1987

The HEPP offers a wide range of purchasing alternatives that will allow education customers to continue investing in Apple products. Highlights of the program include a competitive, multilevel pricing structure for greater purchasing flexibility and an authorized Apple education dealer network trained to provide the education customer with service, support, and guidance in ordering products.

Domestic, public, private, and parochial nonprofit educational institutions all qualify as eligible purchasers. All Apple® products are available for purchase under Apple's Education Program.

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Success Story Program

Marketing and Sales Information

October 1, 1988

Apple's Success Story Program seeks out customer testimonials from a wide spectrum of businesses that are using Macintosh™ in both mainstream and unusual applications. The program maintains a database of Success Stories, which are used by Apple in a variety of marketing materials and programs including:

- Apple marketing collateral
- Advertising (national & regional)
- Press articles
- Marketing videos
- Speeches at trade shows, seminars, and Apple-sponsored events
- Sales training
- Apple newsletters

Potential story leads are gathered from a variety of sources, and good leads are followed up and developed into success stories. Until now, most lead information and testimonials have come from Apple's Creative Services, Business Marketing and Public Relations groups. But we would like to involve Apple developers in the program. If you have any exciting leads or testimonials, we want to hear from you! If your information is appropriate, it might be included in the various Apple marketing materials and programs that were mentioned above.

Please submit your leads or testimonials in the following format:

- · Company name
- Short description of company
- Contact name and title
- · Address and phone number
- Macintosh configuration
- Major applications (Desktop Publishing, spreadsheets, etc.)

We are very sensitive to the confidentiality of "contact information," which we take great care to protect. Please let us know if you would like to be contacted before we call your customer.

Thanks for your participation in this very important program.

Please send your testimonials to the following U.S. Mail or AppleLink address:

Apple Computer, Inc.
20525 Mariani Avenue, M/S 36N
Cupertino, CA 95014
Patty Kammerer
Attn: Success-Story Program
AppleLink: BIZ.SUCCESS

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Apple Computer Clubs

Marketing and Sales Information

August 1, 1988

In order to better support your selling efforts to the consumer and K-12 markets, Apple Computer would like to introduce you to Apple Computer Clubs and its comarketing Program.

Apple Computer Clubs Program

Apple Computer Clubs has been funded by Apple Computer since 1983. The program is designed to facilitate educational computing on Apple computers through the formation of computer clubs within K-12 schools throughout the world. The average club consists of a teacher and 30 students (usually grades 4-9) who meet either during or after school to further explore the world of Apple computing. The teachers and student members are some of the most enthusiastic people in computer education.

Apple Computer Clubs offers the following support to local clubs:

- Special software and activity pages exclusive to the clubs, with programs for both educators and students
- The Apple Computer Clubs Handbook, a 167-page, fully illustrated book, complete with ready-made lesson plans to help educators start and run a club successfully
- The Apple Challenge Awards Program Handbook, a 100-page book with computer-related projects in various application areas, affording students the chance to win recognition and awards
- Quarterly newsletters and timely bulletins for teachers and students to keep them up to date on the latest computer and club news

Apple Computer Clubs Comarketing Program

The comarketing program is designed to offer Apple's third party developers a number of creative opportunities to promote their products to the Apple Computer Clubs. All comarketing program opportunities are designed to provide developers with targeted and effective promotions at economical prices. During the 1988-89 academic year, the following promotional opportunities are being planned:

Resource File: This is a direct mail package which enables developers to place their information—from flyers to catalogs to demonstration disks — into the hands of ACC members. Combining the accuracy of direct mail with the low cost of display advertising, the Resource File is an excellent method of distributing comprehensive information regarding a developer's product to a targeted audience.

Creative consultants are available at competitive rates to assist developers in the design and production of the insert.

Contest promotions will continue to be offered to developers, allowing them to challenge Apple Computer Clubs members to compete against one another utilitizing their company's product and an Apple computer. This is a great promotional tool to build excitement around any product—new or old)





Apple Computer Clubs

Marketing and Sales Information

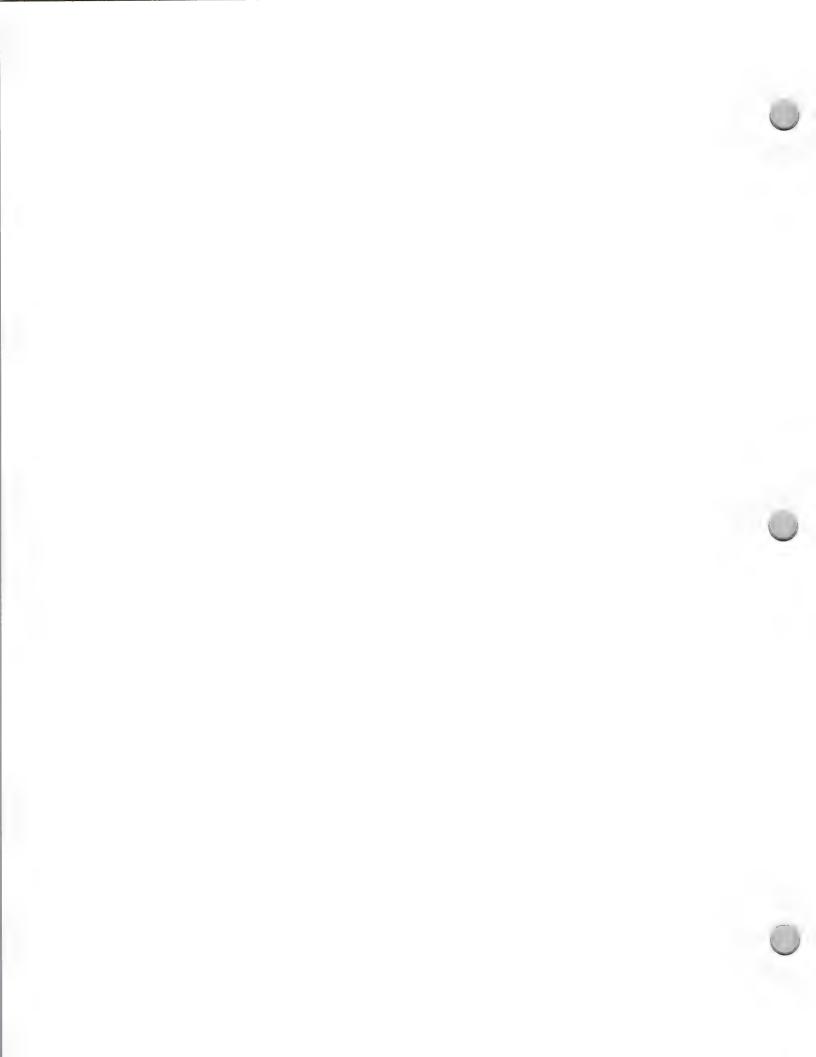
August 1, 1988

Co-sponsorship opportunities allow your company to join Apple Computer in cosponsoring Apple Computer Clubs' National Merit Competition.

Additional Comarketing opportunities geared toward individual developers' needs can also be arranged.

For more information on the Apple Computer Clubs and its comarketing opportunities, please contact:

Apple Computer, Inc. 20525 Mariani Ave. M/S 36AA Cupertino, CA 95014 ATTN: Apple Computer Clubs





Apple VAR Program

Marketing and Sales Information

October 1, 1988

An Apple Value Added Reseller, or VAR, is a reseller who adds proprietary hardware or software value to an Apple® computer and sells, installs, supports and services this complete solution. Apple VARs purchase equipment directly from Apple and participate in a number of Apple programs.

You may be interested in becoming an Apple VAR if:

- You are in a marketplace that requires a complete packaged solution.
- Your success requires the ability to control your own distribution, sales, and quality of support.
- You are already a VAR for other computer manufacturers, and you want to offer an alternative solution in order to be competitive in your marketplace.

Apple VAR Requirements

Apple requires that you offer significant added value, sales potential, and sales and marketing capability before becoming an Apple VAR. Significant value added includes *all* of the following:

- · Proprietary software or hardware
- Service
- Technical support
- Installation

The Apple VAR Program

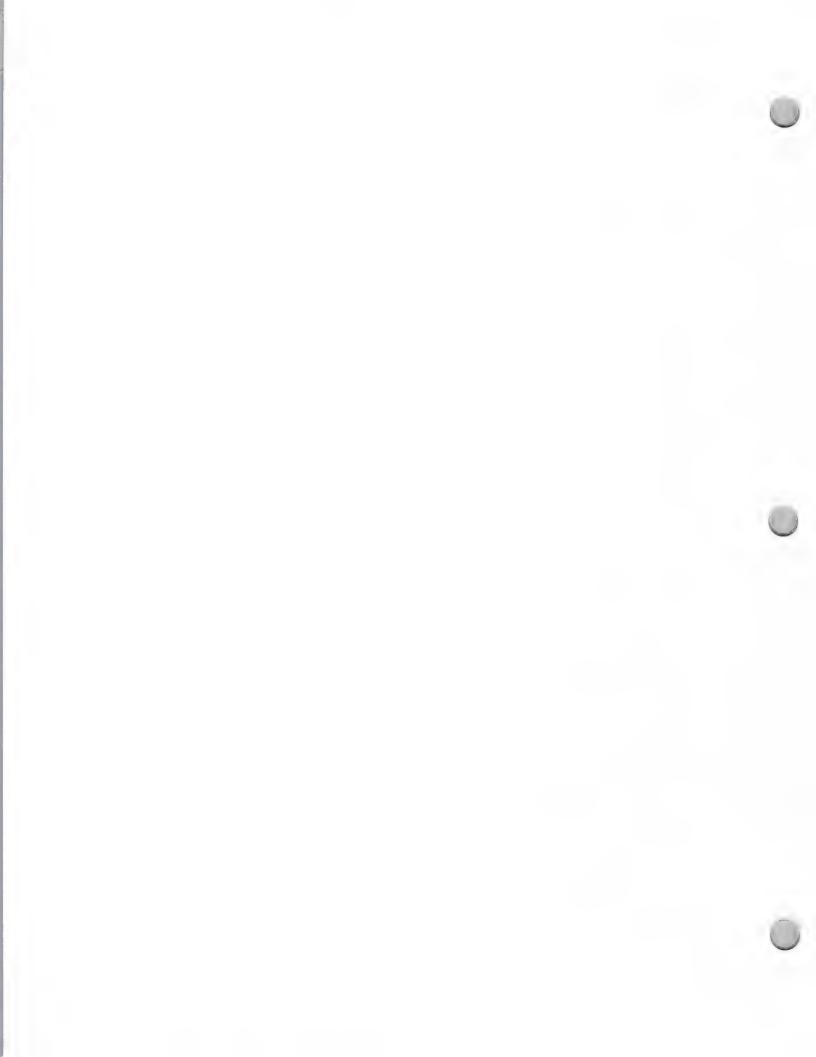
Apple is continuing to strengthen its relationship with Apple VARs by offering a variety of VAR programs. The programs help VARs develop, market, sell, and service their Apple-based solutions. Following is a brief description of these programs:

Product Development Programs

- Apple VAR Development Equipment Purchase Program—entitles VARs to purchase development equipment at reduced prices.
- Apple's Sales Technical Support—offers technical resources through a local systems engineer.
- New Product Previews—allows selected VARs to preview Apple products prior to their introduction.
- Developer Seeding—seeds selected VARs with development machines.

Marketing and Sales Programs

- VAR Fund—a co-op advertising and market development program, that provides reimbursement funds based on a percentage of your total purchases from Apple.
- Quick StartTM A unique program that lets you spend dollars on advertising and market development activities before the amount has accrued in your VAR Fund Account.
- Apple VAR Lead Referral Program—an 800-number referral service that offers prospective buyers a phone number to call for authorized VAR solutions.
- Product Training and Support—product and support training, collateral materials, and access to the AppleLink® information and communications network.
- Monthly Apple Mailing/Newsletter—a monthly package of information, including the VAR AppleGram newsletter.





Apple VAR Program

Marketing and Sales Information

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Financial Programs

• Inventory Financing and the Apple Commercial Credit Plan—financial programs to help VARs even out their cash flow.

Your Next Step

If you are interested in becoming an Apple VAR, your next step is to locate an Apple VAR sales representative. Please contact the Developer Programs Hotline at (408) 973-4897, and the Developer Programs Representative will direct you to the VAR sales representative in your area. The Apple VAR sales representative can provide more information on becoming an Apple VAR.

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VAR Products

Marketing and Sales Information

October 1, 1988

Before you choose to design another horizontal productivity tool, stop to consider Value Added Resellers (VARs). Your product could be part of their value added solution. VARs buy equipment directly from Apple, add value in the form of proprietary software or hardware, and then resell a complete solution to their customers, supplying installation, service, and support.

You can find a number of opportunities in the VAR channel. You can license VARs to sell your product in specific markets or regions, or you can develop custom hardware or software specifically for a VAR.

Producing VAR Oriented Products

VARs typically sell high technology equipment into specific vertical markets, sometimes offering additional third party hardware and software to their own solution.

If you want to create high end versions of your current retail products but lacked the infrastructure to sell to and support new markets, VARs are an option for distribution.

You should also keep VARs in mind when developing your retail products, and leave them as open and expandable as possible, so that you or your VAR customers can modify them later to fit their needs.

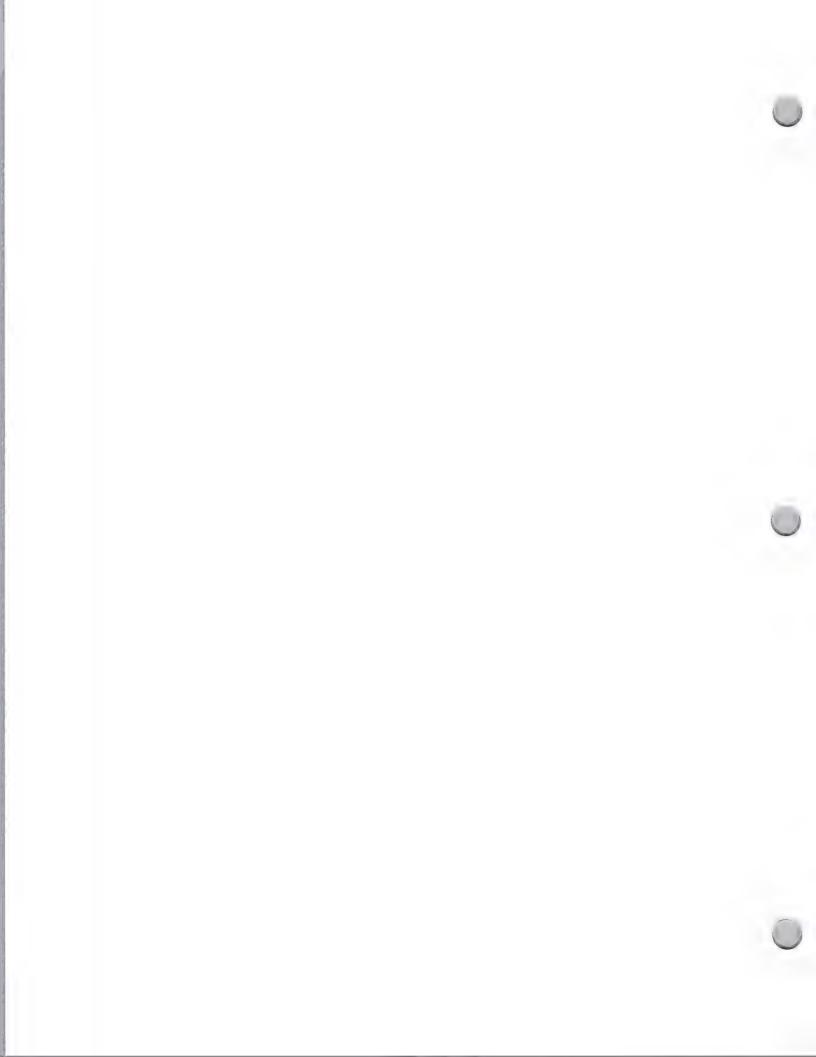
Here are some examples of products that VARs can use:

- Libraries of commonly used code, such as three-dimensional graphics or ISAM routines that can be used by VARs as they develop their applications
- Database and application generator packages Customizable financial packages
- Data server products
- Communications products that let VARs tie Apple products into the minicomputers they may sell, or into their customers' mainframes
- High speed graphics processor cards
- Instrumentation bus cards
- Three button mice
- Data acquisition equipment
- Large storage devices
- Large color screens
- High resolution scanners and optical character readers

Supplying VARs with Custom Software or Hardware

Many developers today supply custom software or hardware to VARs. Some developers exist solely to develop software for VARs. Others are willing to modify their current horizontal application to fit the needs of specific VARs.

You may find that it is worth your while to perform custom development for VARs either at the request of your current customer base, or through active marketing of your development resources.





VAR Products

Marketing and Sales Information

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Licensing VARs as Market Specific Resellers

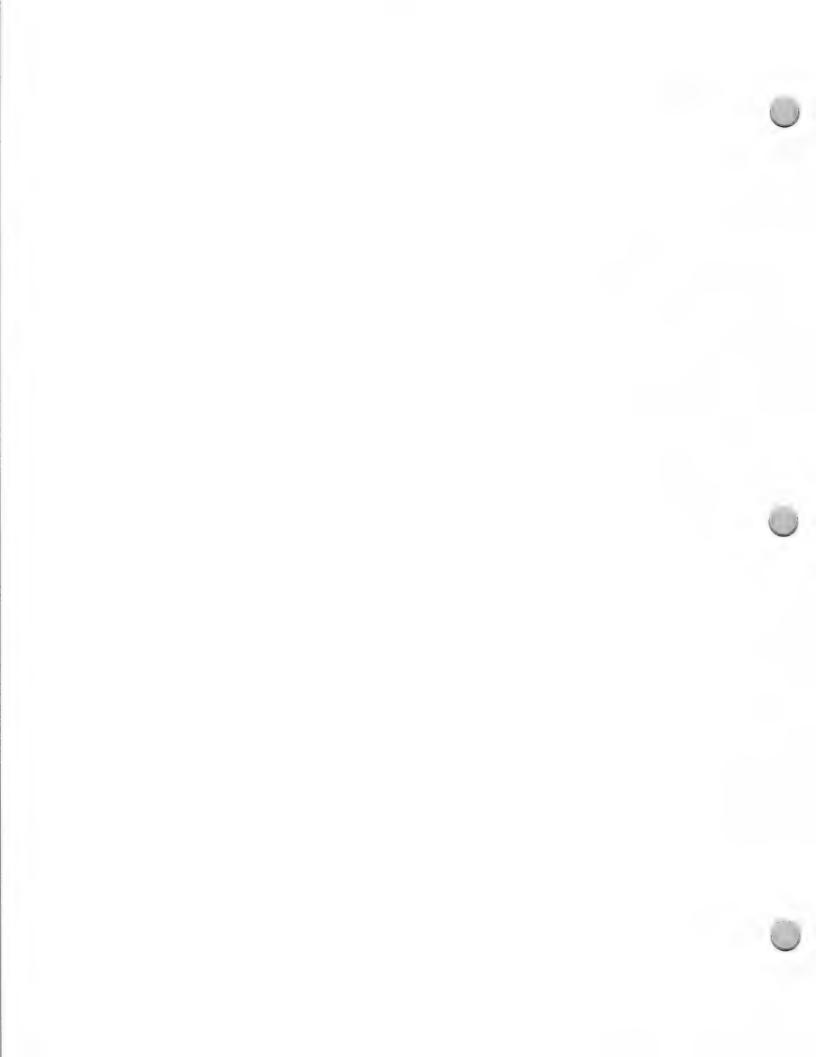
You can design a package aimed at a vertical market, and market it through Value Added Resellers. VARs understand the industries that they sell into and are generally support-oriented. For example, your Newspaper Classified Advertising Management application might best be sold by a network of Value-Added Resellers that sell their products only into newspapers. It might even become practical to become a VAR yourself, selling your products directly to customers through your own salespeople.

How Can I Reach Apple's VARs?

If you have a product that you think would be appropriate for Apple VARs or would like to get in contact with an Apple VAR, or if you have any questions, please contact Carol Eikanas at the following address:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51-W Cupertino, CA 95014 VAR Sales Attn: Carol Eikanas

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Direct Mail Tips

Marketing and Sales Information

February 1, 1987

Direct mail, unlike many other forms of advertising, allows you to communicate specific information to select a group of people and elicit a response from them. For this reason, direct mail is used more often than any other media for promoting market development activities. Direct mail is also an extremely cost effective means of communication, because it is audience specific. While other advertising methods may reach more people for your dollar, if they're not interested in what you have to say, you're wasting your money.

Targeting Your Audience

An appropriate mailing list is the most important ingredient for success. A well defined audience is the key to a successful direct mail campaign. You may define your audience in any number of ways; however, the more specifically you define a group of potential buyers, the better job direct mail will do for you.

One group you should be sure to target is your installed base. Research proves that people who have bought from you are 10 times more likely to buy from you again than are strangers from a rented list. Regular communication with customers will turn them into long term clients. Establish preferred client mailings of newsletters that keep customers up to date on your latest products. Let your customers know they are important to you.

Writing Direct-Mail Copy

The most important thing to remember when you write direct mail copy is to present a problem and then provide the solution. Speak directly to your audience and request immediate action. The following are seven steps to consider when you write your direct-mail copy:

- Use the headline to communicate a benefit to the reader.
- Expand upon this benefit immediately in the copy.
- Present a problem and offer your product as a solution.
- Use case histories or examples to illustrate. Always get the approval of anyone you are using as an example.
- Write as if you were talking to the reader personally.
- Close with a call to action—tell the reader to act immediately.
- Use a postscript (p.s.) as a reminder of the benefit or offer an incentive such as a gift. A postscript is often the part of a letter read most often.

Choosing Your Form of Direct Mail

Direct mail comes in many different forms, and certain forms work best for different kinds of messages. Before you decide on a format, consider how much information you want to





Direct Mail Tips

Marketing and Sales Information

February 1, 1987

communicate to the reader. The more you have to say, the longer the format of your direct mail piece. Whatever the form, make sure your direct mail piece looks professional. No photocopied materials (or for that matter, any cheaply produced materials) should be sent to your selected audience.

Consider the following direct mail formats:

- Letters: This basic form of direct-mail communication is best used for specific offers that require a lot of information, such as the introduction of a new product.
- Brochures: Ideal for prestigious, elaborate presentations of your product and services and support, where the message is best carried by visual elements rather than copy.
- Catalogs: Books or booklets that show what products you carry and generally use both written copy and visual elements to present an offer.
- Postcards: An inexpensive form for brief announcements such as special offers and preferred customer mailings that do not require many details.
- Self-Mailers: A one piece format that does not come in an envelope (generally an 8 1/2- x 11-inch folded sheet). Ideal for specific product offers, approximately 100 to 200 words. Self mailers are also a good format for newsletters, which may be longer than 200 words.
- Postage Paid Business Reply Card: Gather demographic information from customers and prospects. Offer them an incentive. It may be worth the fee it will cost you to get an indicia—good for a year's use—from the post office. Have it printed on the reply card using the specifications provided by the post office, and observe the size requirements.

In addition, when you use an envelope, include teaser copy on the envelope. The envelope is the first thing that greets your reader's eye. Teaser copy will motivate the recipient to see what's inside, for example: "Free demo disk offer inside," or "Exciting news about new products," or "Change the way you do business forever".

Direct-Mail Lists

Where do you find all those names and addresses? There are a variety of resources that provide mailing lists. Consider:

- Customer Files: Keep your customer files up-to-date. Customers who have already bought from you, and their friends and business associates are your best prospects.
- The Information Exchange: You may mail to a variety of Apple customers: User groups, VARs, authorized Apple dealers, and AUC and HEPP schools. Information is available in this binder.
- Local Chamber of Commerce: Your local chamber has membership lists, usually categorized by company and type of business, or alphabetically by members. They will typically





Direct Mail Tips

Marketing and Sales Information

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rent you the list for a nominal fee. The lists are composed of local business and some national (if a national company's office is located in your city).

- Yellow pages: Look under "Associations," then under specific occupational and business headings. Many organizations will rent their membership lists for a nominal fee. If you use businesses listed in the yellow pages under a specific category (for example, advertising agencies), call each company to find out who should receive your mailing. This will pay off in higher readership and response.
- Standard Rate and Data Service (SRDS): This service publishes a complete listing of various mailing lists for occupations (for example journalism and banking), as well as many mail list companies. An SRDS edition can be found in your public library.
- Mail List Brokers: You can find these list houses in the yellow pages under "Mailing Lists." A broker can provide a narrowly focused list. For example, local college-educated businesspeople between 25 and 45 who earn at least \$50,000 a year. Use the SRDS to help choose a broker. The SRDS lists broker company information such as rates and quantities, description of who's on the data base, credit policy, and delivery schedule. Following is some additional information about using a broker:
 - Mailing lists can be bought or rented, and the distinction is important. It costs more to buy
 a list. Rentals are for one-time use only, except for prospects who respond to your
 mailing. These become part of your "customer file."
 - To ensure that you only use rental lists once, list owners "seed" their mailing lists. This means that certain names on the mailing list are people hired by the list owner to check on your list use.
 - Buy a zoned map from Rand McNally. The map will show sectional center facilities (SCF) codes. These are the first three digits of a zip code, which indicates the city in which a possible customer lives. Let your broker know which SCF codes you want to use.
 - The cost of renting names will be anywhere from \$24 to \$100 per thousand names. For an additional \$3 to \$5 per thousand, the broker can select names by SCF codes, or print the addresses on pressure-sensitive labels. Some list companies require a minimum order of 5,000 names.
 - Ask for lists that are kept "clean," which means that "undeliverable" names are removed and address updates done a regular basis.
 - Ask for home addresses, if available. They produce a higher response rate.
 - Use names of individuals instead of company names. Direct mail addressed to a company without a person's name is likely not to be read by anybody and to come to rest in a wastebasket.





Direct Mail Tips

Marketing and Sales Information

February 1, 1987

Postage Information

Whether you handle the mailing yourself or go to a mail house, the following postage information should be of value to you:

- First Class Mail: It costs more, but almost always ensures that your envelope will be opened. It also gets to its destination faster and saves you the sorting and bundle tying required with third class mailings. First class mail that's presorted by zip code can qualify for a lower rate of postage.
- Bulk Mail: This is third-class mail of a least 200 identical pieces sorted and batched by zip code before they reach the post office. If you get your list from a list house, it will already be in zip code order. To use the third-class bulk rate, you must get a bulk-rate permit from the post office. This presently costs \$50 annually. Third-class mail can take up to 12 days to arrive at addresses in the immediate area, and even longer outside your area.
- "Address Correction Required": Print this above your mailing label. It directs the post office to return undeliverable mail to you with the new address, if available. This service will raise your postal cost but give you essential information for keeping your customer file current.

Maximizing Results

Although the average response rate for direct mail is 1 percent, studies show that this can be increased (up to 20 percent or more) by thorough follow-up. This includes:

- Follow up with a phone call a few days after you are sure the direct mail has arrived. Reiterate the benefits of your offer.
- Track responses by keeping careful, dated notes from your telephone conversations. Those who are not interested now may become interested later. Solicit these prospects with mailings and phone calls throughout the year.
- Weed out duplicate names, because duplications are costly and depersonalize the message.
- Gather demographic information from customers and prospects. Offer them an incentive for filling out an extensive questionnaire that provides you with information such as name of employer, position, age, income, homeowner or renter, dependents, use of computer, specific applications used, total purchases, and anticipated purchases over the next year. This information will help you pinpoint your audience more accurately when purchasing future mailing lists.

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Developer Mailing

Marketing and Sales Information

August 1, 1987

Have you ever considered offering other Apple developers discounts on your Apple compatible product(s) or providing them with product information?

We have a service that will enable you to provide product information to Apple Certified Developers. You can send direct mailings, such as product brochures, newsletters, self mailers, and business reply cards. This is an opportunity for you to let other developers know about your Apple compatible product(s). For instance, you could send a direct mail piece that includes a special invitation to a seminar or training class, or a new product announcement.

Although we cannot provide you with the list of Apple Certified Developers directly, we have made arrangements with an independent mail house that will receive Apple labels and send out the mailing for you. Your mailing will be sent to the Apple marketing contact at each company.

If you do a mailing, you are not required to mail to all developers. You can request one of the following sets of labels:

- Macintosh™ developers
- Apple® II developers
- Both Apple II and Macintosh developers
- Developers located in specific states

Procedure

If you are interested in sending a direct mailing to Apple's Certified Developers, please provide a sample of your cover letter and brochure or flyer. After we review and approve your information, we will put you in touch with the mail house that handles the developer-to-developer mailings (please refer to Mail House Information in this section). Send your product information to the address below:

Developer Programs
Apple Computer, Inc.
20525 Mariani Avenue, M/S 51W
Cupertino, CA 95014
Attn: Direct Mail Service

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National Account Mailing

Marketing and Sales Information

October 1, 1988

The National Account program is a direct sales program targeted at selected Fortune 500 or Forbes 500 companies. The objective of the National Account channel is to gain significant penetration into 75 targeted accounts by enhancing the image of the Apple® Macintosh® as a business computer. The acceptance of the Macintosh within America's largest corporations has marked a turning point for Apple's National Account channel.

In fact, the Macintosh is appearing on a growing number of approved vendor lists in companies such as Eastman Kodak, Honeywell, Motorola, Seafirst National Bank, Arthur Young, GTE, Peat Marwick & Main, DuPont, and Federal Express. Emphasis is placed on the following business solutions:

- · Communications and networking
- Productivity management
- Desktop publishing
- Engineering/Scientific
- Secretarial packages
- Executive Workstations
- Industry focus solutions

Direct-Mail Opportunities

If you have a product that is appropriate for the business market, there may be an opportunity for you to reach Apple National Accounts with a direct-mail piece.

Procedure

If you would like your promotional materials to be considered for a mailing to Apple's National Account sales force, and National Account customers, you should send the following materials:

• A full working version of your product

• Marketing materials that explain the product's features and benefits, and offer examples of its use

Two copies of current product reviews

Your product and information will be reviewed by two Apple departments: Developer Programs, and National Account Sales and Marketing. You will be contacted by Developer Programs within two weeks regarding whether or not you will be invited to send your direct-mail piece to Apple's field sales force and/or National Account customers independently of Apple. In this case, you will be directed to an independent mail house that maintains Apple's labels. (Refer to Mail-House Information in this section.)

Please send your product information to the following address:

Developer Programs
Apple Computer, Inc.
20525 Mariani Avenue, M/S 51W
Cupertino, CA 95014
Attn: Direct Mail Service

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Dealer Mailing

Marketing and Sales Information

October 1, 1988

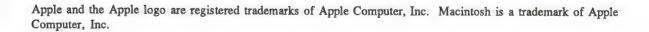
Although Apple does not publish its list of authorized Apple dealers, Developer Programs has made arrangements with an independent mail house that will receive Apple labels and administer the authorized Apple dealer mailings for you. The authorized Apple dealer base is sorted into the following categories:

- Apple® II dealers
- Apple Education dealers (K-12)
- Macintosh™ dealers
- · Macintosh II dealers
- A/UX dealers
- · Music dealers
- Desktop Communication dealers
- Selected states or zip code areas

Any of the above can be sorted by state or zip code.

If you are interested in sending a direct mailing to Apple's authorized dealers, please provide a sample of your direct mail piece. To better qualify your dealer audience, consider including a business reply card. After we review and approve your information, we will put you in touch with the mail house that handles the dealer mailings (please refer to Mail House Information in this section). Send your product information to the address below:

Developer Programs
Apple Computer, Inc.
20525 Mariani Avenue, M/S 51W
Cupertino, CA 95014
Attn: Direct Mail Service







End User Mailing

Marketing and Sales Information

May 1, 1988

Although Apple does not publish its list of end users, we have made arrangements with a company called World Data Corporation to process end user mailings. World Data Corporation handles 1.5 million Apple end user labels. Its mailing list consists of people who have purchased an Apple computer and sent in their warranty card. Note that this is not a comprehensive list of Apple customers. Developers have the opportunity to rent these labels and mail to the following groups upon approval from Apple's Marcom Group. Labels can be sorted by these categories:

- · Macintosh®
- Apple® II
- Business
- Education
- · Each category can be sorted further

If you would like to obtain permission to do a direct mailing to any of the Apple customer groups listed above, please contact one of the following people:

If you need assistance when planning your mailing, please contact:

Henry Disciullo World Data Corp. 500 North Broadway Jericho, NY 11753 (516) 931-2442

or

If you know which customers you would like to mail to, please contact:

Patricia Murtagh World Data Corp. 500 North Broadway Jericho, NY 11753 (516) 931-2442

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Higher Education Mailing

Marketing and Sales Information

October 1, 1988

If you have a product that is designed for the higher education market, you can make sure that Apple's higher education customers know about it through your own mailing by using an independent mail house.

Independent Mail House

Apple will not provide higher education labels to you directly, but you can send mail to these customers by taking your materials to an independent mail house that maintains Apple's labels. The mail house will process the mailing for you.

Procedure

If you would like your product information to be considered for a mailing independent of Apple, we ask that you send Developer Programs the following:

• A full working version of your product

• A sample of your complete direct-mail piece (include cover letter, brochure or flyer, and so on)

• Two copies of current product reviews (if available)

Your product and information will be reviewed by two Apple departments: Developer Programs, and Higher Education Sales groups. These people will determine whether or not it fits into the current market strategy for higher education. Developer Programs will notify you within two weeks if your direct-mail piece is eligible to be sent to Apple's field sales force and/or Higher Education customers independently of Apple. In this case, you will be directed to an independent mail house that maintains Apple's labels (refer to Mail-House Information in this section).

Please send your product information to the following address:

Developer Programs
Apple Computer, Inc.
20525 Mariani Avenue, M/S 51W
Cupertino, CA 95014
Attn: Direct Mail Service





User Group Mailing

Marketing and Sales Information

October 1, 1988

User groups have supported Apple since the company's inception. Today, there are approximately 1,000 Apple User Groups with a combined membership of more than 300,000 nationwide. Of these groups, 42 percent support both Apple® II and Macintosh™ computers; the remaining 58 percent support either Apple II or Macintosh.

Apple User Groups are excellent supporters of Apple and third-party products. They exist within communities, businesses, and universities, supporting Apple users in each market segment. They are known for disseminating information and offering support to users from all backgrounds and with varying levels of experience. At Apple, we recognize them as a valuable resource.

We have set up a system to help you inform international and domestic user groups of the following:

- Your new or revised products
- Programs that you have developed exclusively for user groups
- Your special offers or product discounts for user groups

If you are interested in sending a direct-mail piece to Apple User Groups, please provide us with a sample of what you would like to send to them. Keep in mind that your materials will be sent to the "ambassador" of the user group. The ambassador is the person who is responsible for disseminating information to the members. Therefore, instruct this person to put your information in the groups' newsletter for all members to view. After we review and approve your information, we will provide you with a set of mailing labels. Labels can be divided into the following categories:

- Macintosh
- Apple II
- Higher Education
- Business/Corporations
- Government
- Complete listing

Procedure

- Send in a sample of what you would like to mail to Apple User Groups.
- Upon approval of materials, we will send you a specification order form to be completed and returned with a \$25 check to Quatro Marketing, the company that manages the user group list.
- Once Quatro Marketing receives the order form and check, they will send you a set of the specified user group labels.

Send your product information to the address below:

Developer Programs
Apple Computer, Inc.
20525 Mariani Avenue, M/S 51W
Cupertino, CA 95014
Attn: Direct Mail Service

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Marketing and Sales Information

October 1, 1988

According to John Sculley, Apple's CEO, chairman, and president, "One of our biggest commitments today is to serve the federal government market." To maintain this commitment, Apple is trying to develop innovative, cost-effective solutions for all levels of government.

As the amount of information grows, so, too, does the technology to manage it. The same qualities that have made Apple® products successful in the business market, features such as ease of learning, graphics capabilities, and compatibility and connectivity with IBM, DEC, and WANG products, will provide the catalyst for Apple's success in the federal government market—and yours.

Direct-Mail Opportunities

If you have a product that is designed for the federal government, there may be an opportunity for you to reach federal government agencies and Apple's federal government sales force with a direct-mail piece of your own.

Procedure

To have your product considered, you should send the following materials to Apple Developer Programs:

· A full working version of your product

· Marketing materials that explain the product's features and benefits and offer examples of its use

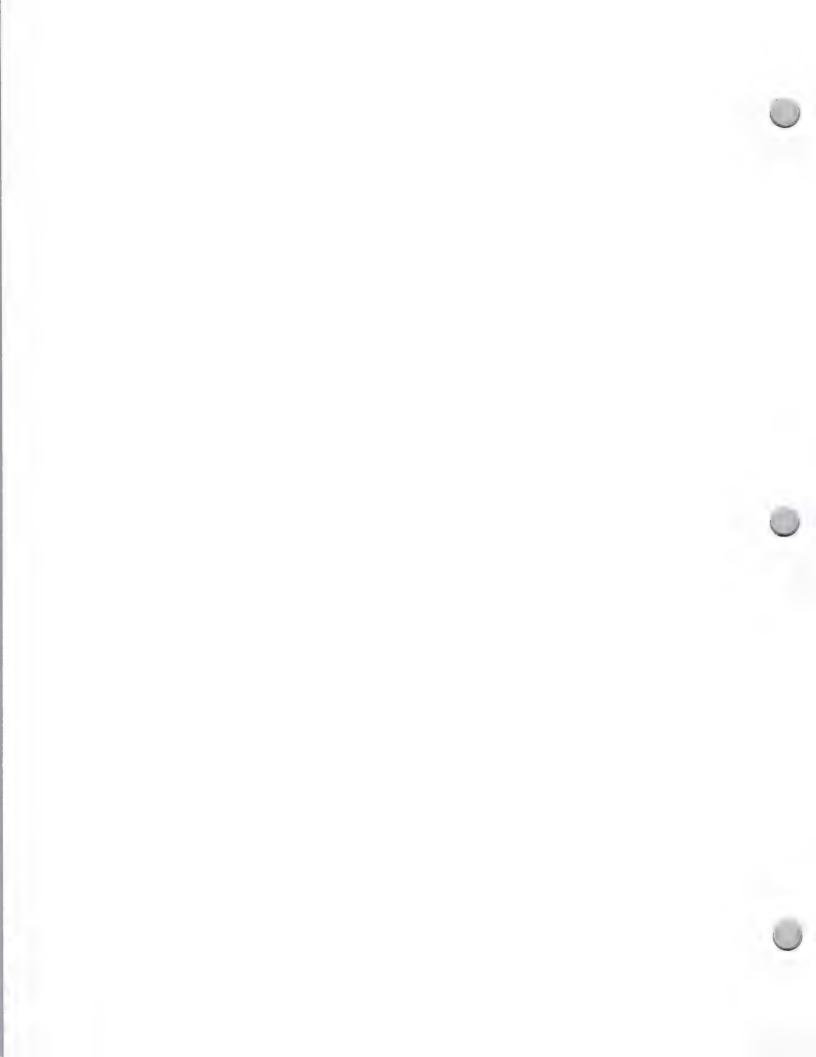
Two current product reviews

Your product will be reviewed by three Apple departments: Developer Programs, Promotional Testing, and the Federal Systems Group. Developer Programs will contact you within two weeks of receipt of your materials to tell you whether your product is eligible. You will then be directed to an independent mail house that maintains Apple's labels (refer to Mail-House Information in this section).

Please send your product information to the following address:

Apple Computer, Inc Developer Programs 20525 Mariani Avenue, M/S 51W Cupertino, CA 95014 Attn: Direct Mail Service

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VAR Mailing

Marketing and Sales Information

February 1, 1988

What Is an Apple Value-Added Reseller (VAR)?

An Apple VAR is a nonretail reseller who:

- Sells a value-added product, with significant function enhancements, to end users (the product generally represents a unique solution to a vertical market or niche within a broader market.)
- Expands Apple's distribution to specialized markets that cannot be reached by Apple's dealer channel

Some of the important Apple VAR vertical markets are finance, media and publishing, communications, and health services. Apple VARs are most interested in learning about products that cut their development time, enhance their product offerings, or can be incorporated for resale in their total system sale.

Direct Mail Opportunities

If you have a product that is appropriate for the VAR channel, there may be an opportunity for you to reach Apple VARs with a direct-mail piece, either independently of Apple through your own mailing, or in a few instances, through the *VAR AppleGram*, Apple's monthly mailing to Apple VARs.

Procedure

If you would like to be considered for a mailing to Apple's VARs and VAR Sales Representatives, you should send the following materials:

- A sample of your direct-mail piece; specifically, a cover letter and brochure or flyer
- A full working version of your product
- Two copies of current product reviews

Your product and information will be reviewed by three Apple departments: Promotional Testing, Developer Programs, and VAR Sales.

You will be contacted by Developer Programs within three weeks and notified about which of the following options is available to you:

- You will be invited to send your direct-mail piece to Apple's VAR customers independently of Apple. In this case, Developer Programs will direct you to an independent mail house that maintains Apple's labels. (Refer to Mail-House Information in this section.)
- If your product is of unusual interest and fits the market needs of the majority of the Apple VARs, it may be chosen to be featured in the VAR AppleGram, the vehicle for communicating with Apple VARs about Apple programs and products. In this case, you will be invited to write an article for this publication, and to include appropriate inserts to accompany the article.





VAR Mailing

Marketing and Sales Information

February 1, 1988

Please send your product information to the following address:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51W Cupertino, CA 95014 Developer Programs Attn: Direct Mail Service

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Mail House Information

Marketing and Sales Information

February 1, 1988

Apple does not publicize its VAR, National Accounts, dealer, higher education, and developer lists. However, to help developers send direct mailings to these Apple customers, Developer Programs has made arrangements with an independent mail house that will receive Apple labels and administer the mailings for you. Once your direct mail information has been approved, Developer Programs will provide you with the name of the mail house. The logistics of your mailing will be handled between you and the mail house.

The following information will help you plan your VAR, National Accounts, dealer, higher education, and developer mailings:

Cost of Mailing

Base preparation charges:

Affix Self adhesive Labels - .07¢ per label, plus postage.

Envelope Insertin	g Hand	Mechanical	
1 Item	9.0¢ each	5.0¢ each	
2 Items	11.0¢ each	5.8¢ each	
3 Items	12.5¢ each	6.5¢ each	
4 Items	14.0¢ each	7.0¢ each	
Folding	6.0¢ each	2.0¢ each	

Envelope postage metering - 2.6¢ each Tie and sack for bulk rate - 1.7¢ each Stapling - 3.5¢ each Delivery to post office - \$10.00

General Information

• It usually takes 5 to 7 days to receive a set of labels from Apple.

• The mail house prefers to have your material at its warehouse 10 days prior to the mail-house drop date.

Billing Procedure

Advance payment of postage fees and services is required. If you have any questions, please contact Carol Eikanas at:

Apple Computer, Inc.

20525 Mariani Avenue, M/S 51W

Cupertino, CA 95014

Attn: Mail House Information AppleLink address: Eikanas1

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Marketing and Sales Information

October 1, 1988

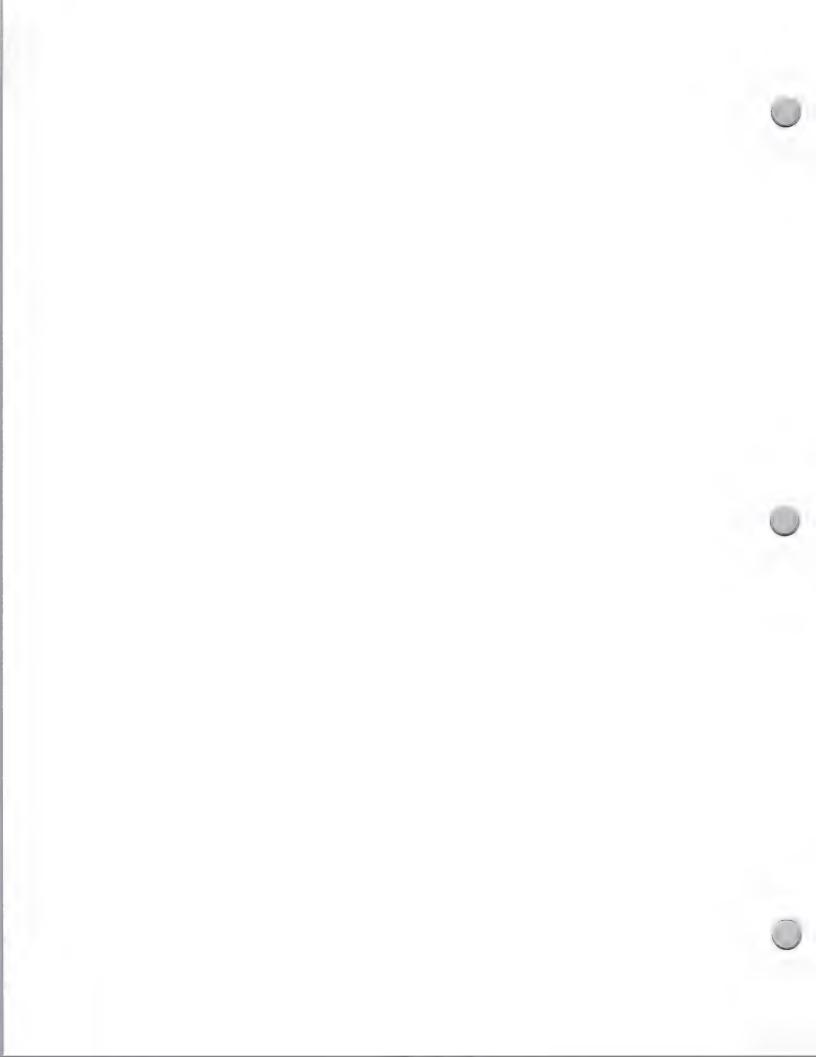
Bringing a product to fruition can be a satisfying and rewarding experience. Choosing the best publisher to package, market, and distribute your product is an important factor in realizing this goal.

All of the publishers on the following list have experience in publishing software for the Apple[®] II and/or Macintosh[™] personal computer. Some preliminary investigation can help speed up the selection process for your initial list of prospective publishers. By examining current packaging, user manuals, distributing, and advertising practices, you can start with publishers whose general philosophy you are in agreement with.

Some publishers have standard submission packages that include their evaluation and testing criteria, as well as a standard contract agreement. Others have very informal programs, and everything is negotiable. You may want to contact several companies for submission packages before actually submitting your product for comparison purposes.

Before you sign *any* agreement, however, we recommend that you have it examined by a good contract lawyer. To have all of your expectations met, both you and the publisher must clearly understand what they are at the beginning of your relationship. There are many aspects to marketing a product. Here are just a few points you will want to consider:

- How long will it take to bring your product to market—What milestones should go into the contract? Do you want a penalty clause?
- Is your product in final form—or are you willing to add features, revise, change, or rewrite parts of your code? How long will it take?
- Who will write the manual—How long will it take? How much will it cost? What will it look like? Will it include a tutorial?
- Exclusivity vs. nonexclusivity—Do you want to maintain any marketing rights or are you willing to turn over your product to this company? Who owns the code?
- How many copies (finished product) do you want for your personal use once the product is on the market?
- What kind of payments do you want—Royalty? One-time? Guaranteed minimum?
- What kind of software protection scheme do you want, if any?
- What will the packaging look like—Do you want final review? Will there be a demo disk?
- How will this publisher distribute your product—How many dollars will be spent?
- How will your product be advertised—Magazines? Newspapers? Trade shows? How will it be introduced?
- Is there an international market for your product—will this publisher provide localization?
- What are your legal rights if the publisher is bought out or reorganized?





Marketing and Sales Information

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- Do you want your name associated with this product? Do you want to choose the name for your product?
- How will your product be supported? Who will make revisions after it is on the market?

In turn, it is important that you have a thorough understanding of your product, its niche in the marketplace, and why it is better than your competitors'. Remember that software publishers look at hundreds of products, and yours must be very unusual and innovative before they will consider investing their money in a new venture.

References: Legal Care for Your Software, by Daniel Remer, A Nolo Press book The 1985 Programmers Market, by Writer's Digest Books

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Marketing and Sales Information

October 1, 1988

Software Publisher List

The following companies are interested in publishing Apple software. Apple Computer provides this list for informational purposes only. This does not constitute an endorsement or recommendation. All products listed below are Apple-compatible products. Some companies are shipping more products than are listed. If you are interested in publishing Apple-compatible products, please contact Peggy Jensen at (408) 973-4897 or AppleLink her at JENSEN.P, so that she can add you to this list.

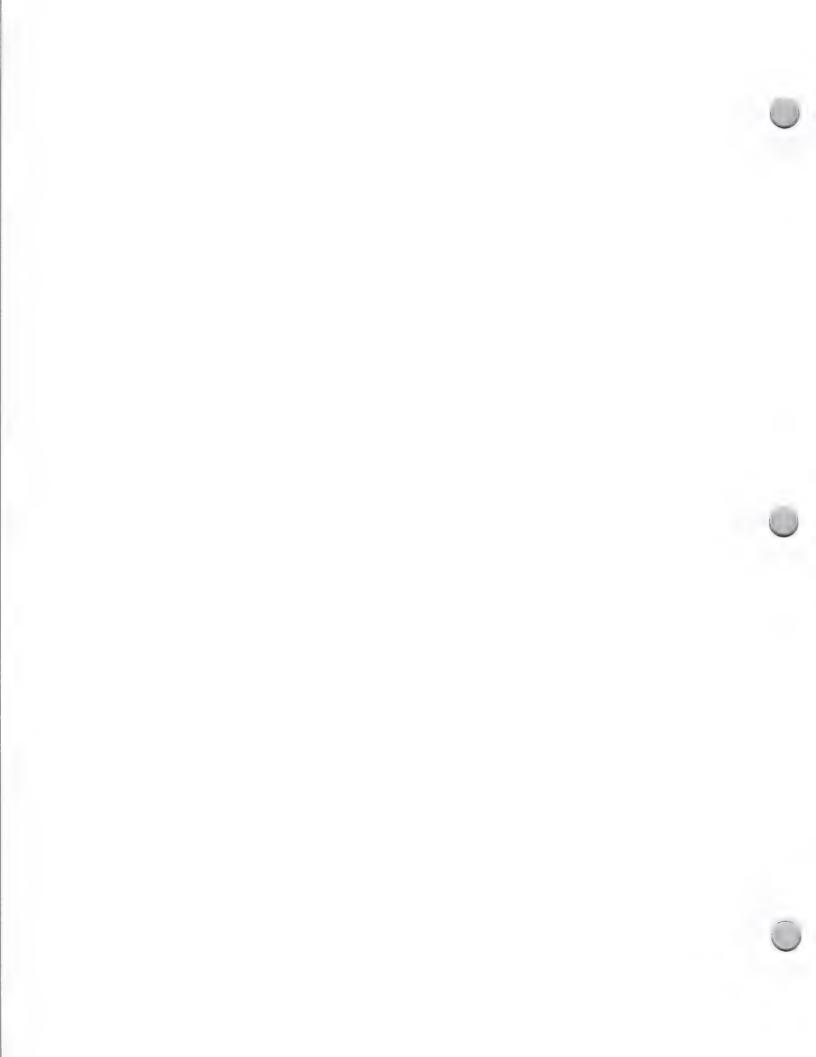
Company	Current Products	Focus	Machine*	Contact
Abacus Concepts, Inc. 1984 Bonita Avenue Berkeley, CA 94704	StatView II StatView SE+Graphics	Statistics/ Data Management Presentation Graph	M	Will Scoggin (415) 540-1949
Accent Software, Inc. 4546 El Camino Real, # S Los Altos, CA 94022	TGS Graphic Solutions Accu-Shapes	Graphics Tools & Animation	Α	Nancy Van Clef (415) 949-2711
Activision, Inc. 3885 Bohannon Drive Menlo Park, CA 94025-1001	Business Class Focal Point Reports PaintWorks Writer's Choice Elite	Consumer market HyperCard	M	Paul Zuzelo (415) 329-0500
Addison-Wesley Pub. Jacob Way Reading, MA 01867	MicroCap II Micro-Logic II MiniTab Math Cad Lotus 1,2,3	Educational: Financial Anal.	В	Alan Jacobs (617) 944-3700
Addison-Wesley Pub. Jacob Way Reading, MA 01867	Smart Eyes The Hobbit Infocom to book trade Teach yourself Essen. of Accounting	Per. Productivity Home Education Books	В	Jane Tamlyn (617) 944-3700 X2626
Addison-Wesley Pub. 2725 Sand Hill Road Menlo Park, CA 94025	Mathematic Skills, 1–8 Mathematic Problem Solving Information Lab Software Jr. High	K-12	A	Roger Kincaid (415) 853-2577
Advanced Ideas, Inc. 2902 San Pablo Avenue Berkeley, CA 94702	Wizard of Words The Game Show Tic-Tac-Show Lucky's Magic Hat Dinasaurs	Educational K-12	A	Brent Snyder (415) 526-9100





Marketing and Sales Information

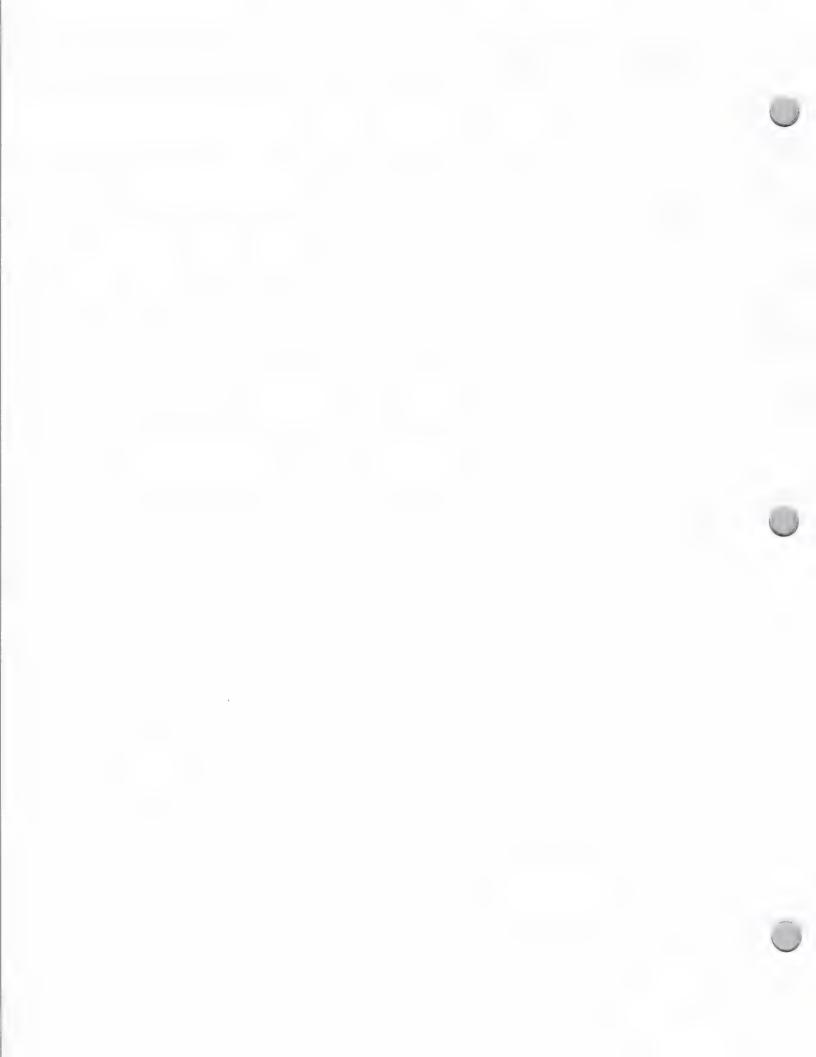
Company	Current Products	Focus	Machine*	Contact
Advanced Logic Systems 1211 Alderwood Avenue Sunnyvale, CA 94089	Mighty Mac Handlers WordHandler SpellWorks	Hardware Software	В	Y. Ponnambalam (408) 747-1988
Aegis Development, Inc. 2115 Pico Blvd. Santa Monica, CA 90405	Doug Clapp's Word Tools Showcase FX Arazok's Tomb	Graphics Animation	M	Michelle Mehteria (213) 392-9972
American Intelliware Corp. P.O. Box 6980 Torrance, CA 90504	Scriptwriter Storyboarder Interactive Teacher	Film/Adv./TV Training Educational Training	M	James Lipton (213) 533-4040
Artsci, Inc. 5547 Satsuma Avenue N. Hollywood, CA 91601	Softforms Hearts MagicWindow	Productivity Personal & Bus. Utilities	В	William Smith (818) 985-2922
Ashton-Tate 20101 Hamilton Ave. Torrance, CA 90502	Framework dBase III Chart Master	Business Productivity Innovative	M	Corp. Commun. (213) 538-7317
Bantam Electronic Pub. 666 Fifth Avenue New York, NY 10103	HyperCard Handbook HyperCard Developer Guide Adobe Illustrator	Business application and programming	ns A	Kenzi Sugihara (212) 765-6500
Bergwall Educational Software 106 Charles Lindbergh Blvd Uniondale, NY 11553	The Heart Frog Disection Lab Rpt. Math Review Math 3-D Basic Electricity-Alternate Currents	Education	A	Patty Quilliam (516) 222-1130
Borland International 1800 Green Hills Rd. Scotts Valley, CA 95066	TurboTutor, TurboPascal Turbo Pascal Tool Box Numerical Methods Tool Box	Business Consumer	M	Lori Flesher (408) 439-1653
Bourne & Company, Inc. 200 S. Tryon, Suite 1404 Charlotte, NC 28202	Manna Church S/W Systems	Church- Related Programs Word Processing	A	Ernest Bourne (704) 377-9109
Broderbund Software 17 Paul Drive San Rafael, CA 94903	The Print Shop Dazzle Draw Carmen San Diego	Creativity Business/Education Entertainment	В	Harry Wilker (415) 492-3200





Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
Brooks/Cole Publishing 511 Forest Lodge Rd. Pacific Grove, CA 93950	Algebra Mentor Statdisk, MAPLE Mathematics, a Good Beginning Solving Algebra Word Problems	Higher Education	В	Robert Evans (408) 373-0728
Chang Laboratories, Inc. 5300 Stevens Creek Blvd. San Jose, CA 95129	Rags to Riches Accounting Series	Contacts-Activities Time Relational DataBase	M	Gary M. Chappell Jenny Finnegan (408) 246-8020
Chariot Software Group 3659 India Street, Suite 100 San Diego, CA 92103	MicroTest 3 MicroGrade	Education	В	Katherine Henderson (619) 298-0202
CLARIS Corporation 440 Clyde Avenue Mountain View, CA 94043	MacWrite MacProject AppleWorks	Business Educational Heath Science	В	Kyle Mashima (415) 960-1500
Compress P.O. Box 102 Wentworth, NH 03282	General Chemistry Organic Chemistry SuperScoop	Education	Α	Lynn Gadarowski (800) 232-2224
Computer Science Press 1803 Research Blvd., Ste.500 Rockville, MD 20850	Macintosh Pascal	Education Computer Science	В	Barbara Friedman (301) 251-9050
Conduit, Inc. Univ. of Iowa, Oakdale Campus Iowa City, IA 52242	Writer's Helper StageII DASHER Algebra Drill& Practice I,II,III	Education	A	Jim Leaven (319) 335-4100
Courses by Computers 204 Calder Wy. #208A State College, PA 16801	CBC Basic Skill Math CBC Elementary Algb. CBC Special topics in Math	Math Teaching Aids	A	Ralph Heimer (814) 234-2210
Creative Solutions, Inc. 4701 Randolph Rd. #12 Rockville, MD 20852	MacFORTH Plus Race Car Simulator	Utilities, Hardware Productivity Selected Vertical Markets	e M	Christine Colburn (301) 984-0262
Devonian Int'l S/W Co. P.O. Box 2351 Montclair, CA 91763	FONTagenix LASERgenix FOREIGN FONT Edit. ARTagenix	Consumer Business Education	M	Elliot Weinstein (714) 621-0973





Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
Dow Jones & Co., Inc. P.O. Box 300 Princeton, NJ 08543	Dow Jones Straight Talk Dow Jones Spreadsheet Market Manager Plus Dow Jones Market Analyzer Desktop Express	Business Productivity Communications	В	Greg Gerdy (609) 520-4393
Edmark Corporation P.O. Box 3903 Bellevue, WA 98009	Touch Window(hdwr) Touch & See, & Match Reading Program Time Keeper, Sign Font	Special Education Early Childhood Learning	A	Marty Cole (800) 426-0856
Educational Systems Technology Corporation 6170 Cornerstone Ct. E, #300 San Diego, CA 92121	Reading Curriculum Math Language Arts	Educational K-8	A	Alan B. MacIlroy (619) 587-0087
EduSoft P.O. Box 2560 Berkeley, CA 94702	Grade Book Deluxe Worksheet Wizard Test it! Deluxe	Educational	A	Madeleine Mulgrew (415) 548-2304 (800) EDU-SOFT
Electronic Arts 1820 Gateway Drive San Mateo, CA 94404	Bard's Tale II Deluxe Paint Deluxe Music Construction Set 2.5 Chuck Yeager's Advanced Flight Trainer	Entertainment Ceativity	В	Customer Service (415) 571-7171
EMS/McGraw Hill 9855 W. 78th St. Eden Prairie, MN 5534	Interactive Authoring System Keyboarding Series Accounting Series PROs Series	Business Education	В	EMS Div: Robert O'Dell (612) 829-8200
Encyclopedia Britannica Ed. Corp. 10th Floor 425 North Michigan Avenue Chicago, IL 60611	Body Awareness Resource Network Tele-Sales	Business Telemarketing CD Rom	A	Gloria Witek (312) 321-6800
Enterset 2380 Ellsworth Berkeley, CA 94704	QuickSet QuickPaint QuickWord MacGas	Verticals Productivity Utilities	M	Tom Firman (415) 549-0539
1stDESK Systems Inc. 7 Industrial Park Rd. Medway, MA 02053	1st File, 1st Gate 1st Merge, 1st Scan 1st Port, 1st Team	Business Productivity Software Database	M	Bill Hulbig Ned Hinds (617) 533-2203





Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
Family Care Software Div. of Lundin Laboratories 29451 Greenfield Rd., # 216 Southfield, MI 48076	Family care software	Consumer Software Education	M	Steve Quarles (313) 559-4560 (800) 426-8426
Gamco Industries Inc. P.O. Box 1911 Big Spring, TX 79720	Money Telling Time States & Capitals Percent Word Problems Test Generator	Educational K-12 Home Ed	A	Richard Robinson (915) 267-6327
5th Generation Systems 11200 Industriplex Blvd. Batonrouge, LA 70809	PowerStation Suitcase FastBack Pyro!	Utilities	M	Jerry Baldwin (504) 291-7221
Gessler Educational Software 55 W 13th St. New York, NY 10011	The Linguist Spanish Grammar Rev. Battle of Words French Grammar Review Nat. Foriegn Language Exam	Foriegn Language ESL Authoring	A	Seth Levin (212) 627-0099
Great Plains Software 1701 SW 38th Street Fargo, ND 58103	Payroll General Ledger Plains & Simple Network Manager Executive Advisor	Bookkeeping Home Acctg. S-Med. Business Educational Legal	M	Nita Morlock (701) 281-0550
Great Wave Software 5353 Scott Valley Drive Scotts Valley, CA 95066	ConcertWare+Music 1-7 ConcertWare+ MIDI KidsTime II Space Place American Discover	Creative Educational Music Graphics	В	Stacy Mitchell (408) 438-1990
Grimes Company 115 South Arovista Cr. Brea, CA 92621	Switches Security Kit	Business Higher Education	В	Terry Decker (714) 671-3931
Haba Systems, Inc. 6711 Valjean Ave. Van Nuys, CA 91406	The Home Accountant The Tax Advantage MacRelax Haba Persnl. Publisher Front Page	Desktop	М	Chas Haba (818) 994-1899
Hartley Courseware, Inc. 133 Bridge Street Dimondale, MI 48821	Dr. Peet TalkWriter Scuffy and Friends Birds Eye View	Educational: K-12	A	Rosie Bogo (517) 646-6458 (800) 247-1380





Marketing and Sales Information

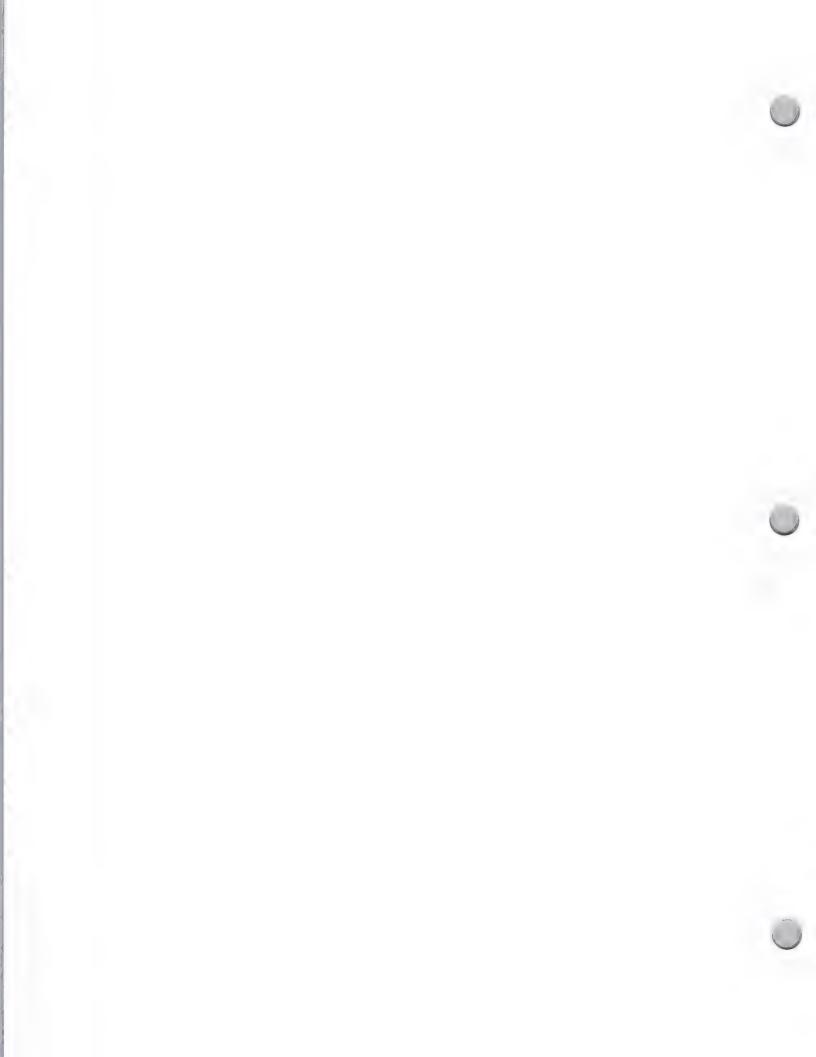
Company	Current Products	Focus	Machine*	Contact
Harvard Associates, Inc. 10 Holworthy St. Cambridge, MA 02138	MacManager DeskToppers	Educational Ind. Consumer Fits Price/Pkg	M	Bill Glass (617) 492-0660
Heizer Software P.O. Box 232019 Pleasant Hill, CA 94523	LogarithMAC	Excel templates HyperCard Micro-Soft Works	M	Ray Heizer (415) 943-7667
Hobar Publication 1234 Tiller Lane St. Paul, MN 55112	Advanced Test Constr. Super Grade Book Review Quiz Program Test Construction	Education: 9–College	В	Sharon White (612) 633-3170
Holt, Rinehart, & Winston, Inc. 6277 C Harbor Dr. Orlando, Florida 32887	Math Unlimited K-8	Educational: Curricular	A	Shirley Ray (800) 228-4658
Houghton Mifflin Mount Support Rd. Lebonon, NH 03766	Sound Ideas MicroCourse Reading Spelling SpeechWare L.1- Reading Compre- hension L.1-3 Math Activities Level 1-8	Education: K-12	A	Florene Saracco (603) 448-3838
HyperPress Pub. Corp. P.O. Box 8243 Foster City, CA 94404	Script Expert Icon Factory HyperSpell, Silver Screen HperTalk Pocket Ref.	Business HyperCard	M	David Gewirtz (415) 345-4620
Icom Simulations, Inc. 648 S. Wheeling Rd. Wheeling, IL 60090	TMON, On Cue Deja Vu,MacKern Uninvited Shadowgate	Utilities Entertainment	В	Dave Gordon (312) 520-4440
Ideaform, Inc. P.O. Box 1540 Fairfield, IA 52556	MacLabeler, Disk Quick MacLabeler Plus HyperBook Maker	Business User	M	Diane Porter (515) 472-7256
Individual Software, Inc. 125 Shoreway Rd., #3000 San Carlos, CA 94070	Flash & Match Flashcard Typing Instructor Encore Individual Training for PageMaker	Training Utilities	M	James Schuyler (415) 595-8855
Infocom, Inc. 125 Cambridge Park Dr. Cambridge, MA 02140	ZORK Trilogy Journey ZORK Zero Shogun Leather Goddesses	Interactive Fiction	В	Eileen Milauskas (617) 492-6000
	of Phobos			





Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
Infosphere, Inc. 4730 SW Macadam Ave. Portland, OR 97201	MacServe LaserServe Comserve	Multi-User Bus. and Networking	В	Evan Solley (503) 226-3515
Instructional/Comm. Technology, Inc. 10 Stepar Place Huntington Station, NY 11746	Guided Reading Processing Power Math Power Clozet Reading Around Words	K-12, College Secondary Adult Reading Math	Α	Stanford Taylor (516) 549-3000
Instructivision, Inc. 3 Regent Street Livingston, NJ 07039	Programs for test prep.: - College Board -HS Prof. Test -SAT,ACT Study Skills for Success	Educational K-University	A	Jay Comras (201) 992-9081
Intellisoft International Inc. 51 Digital Dr./PO Box 5055 Novato, CA 94948	Bookmark Mac™.	Business Educational Consumer	M	Bruce Bierman (415) 883-1188
ISM, Inc Paper Mill Road Phoenix, MD 21131	Surgeon The Office Assistant Mighty Marvel	Medical Software Simulated Edu- cational Games Entertainment	В	Myo Thant, M.D (301) 666-2672
John Wiley & Sons, Inc. 605 Third Avenue New York, NY 10158	Problem Solving w/ Borland Eureka Testing Programs	Higher Education: Engr., Science Business	В	Susan Saltrick (212) 850-6762
Kensington Microware 251 Park Avenue South New York, NY 10010	Maccessories Accent Graphics Universalaccesories	Desk Accs. Hardware Accs. MacAppleccessorie Desk Colors	B	Richard Pekelney (212) 475-5200
Learning Well 200 South Service Road Roslyn Heights, NY 11577	Cause & Effect Drawing Conclusions Principal's Assistant & Library Getting the Main Idea Time Capsule	Educational	В	Mona Russo (516) 621-1540 (516) 358-1000
Lundeen & Associates 100 Atlantic Ave., Ste.107 Alameda, CA 94501	WorksPlus Spell WorksPlus Command	Business	M	Janece James (415) 769-7701
MacMoney 11222 La Cienega Blvd. Ste. 45 Inglewood, CA 90304	0		В	Kathy Farmer (213) 410-9527





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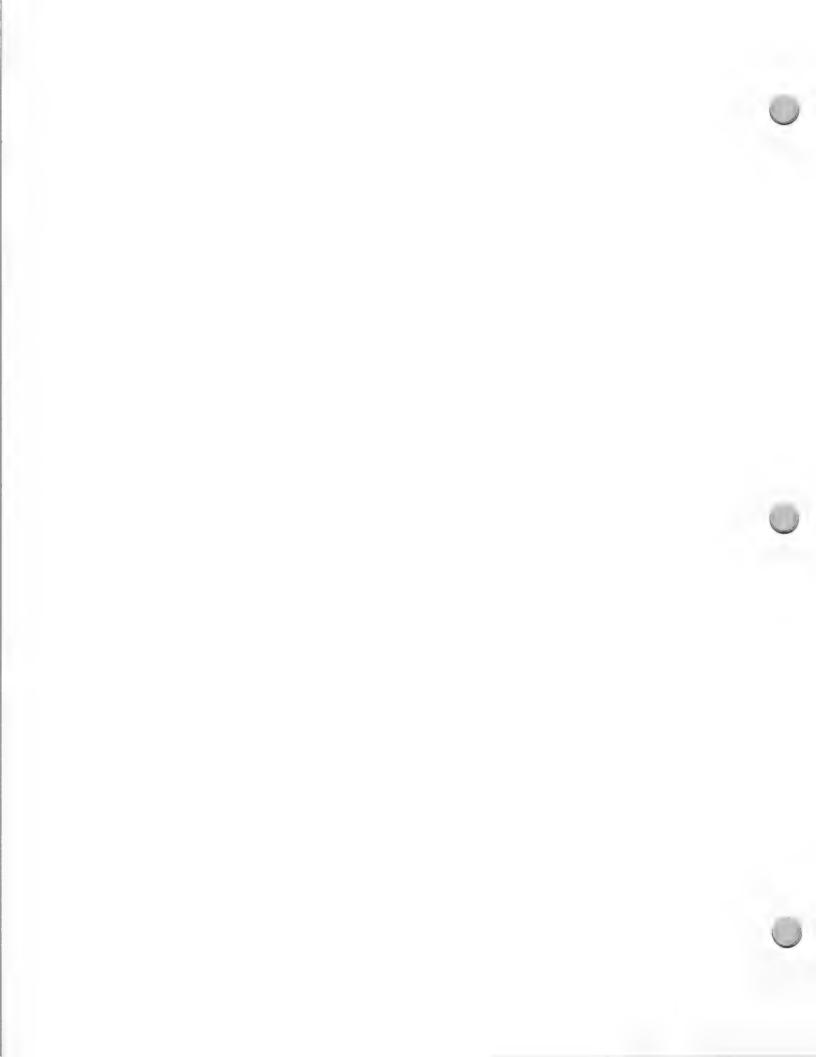
Company	Current Products	Focus	Machine*	Contact
MacroMind, Inc. 1028 W. Wolfram Chicago, IL 60657	VideoWorksII VideoWorks Professional 3D Works VideoWorks Accelerator VideoWorks HyperCard Driver	Desktop Presentations	M	Seth Lambert (312) 871-0987
Magnum Software 21115 Devonshire St., Suite 337 Chatsworth, CA 91311	Vol. 1&2 McPic! Mousemover Slide Show Magician Sound Effects	Productivity Entertainment Education Utilities Teleflex	M	Scott McTyre (818) 700-0510
Magnus Corporation P.O. Box 744 Mukilteo, WA 98275-0744	FileMagic MultiMagic WindowMagic	Business Productivity Innovative FlashCrypt	M	Scott Searle (206) 467-5738
Management Info. Source 1107 N.W. 14th Avenue Portland, OR 97209	XCmds for HyperCard Running HyperCard with HyperTalk Page Maker, Wrod Perfect Advanced Page Maker	Commercial Educational	M	Eric Gates (503) 222-2399 800 626-8257
Meca Ventures 355 Riverside Avenue Westport, CT 06880	Basic Building Blocks Managing Your Money	Small Business Consumer	В	Dennise Callahan (203) 226-2425
MicroFocus 2465 E. Bayshore Rd., #400 Palo Alto, CA 94303	MacCOBOL	Dev. Tools Utilities Languages	M/ Lisa	Peter Katz (415) 856-4161
Micro Media Publishing 6 Arrow Rd. Ramsey, NJ 07446	ReportWorks TestWrita, IEP Works Catalog Card & Labeler SchoolWorks Collection	Education	A	Barb Goldsmith (201) 825-8888
Microsoft 16011 N.E. 36th Box 97017 Redmond, WA 98073	Microsoft Word Microsoft Excel Microsoft File PowerPoint	Business Productivity	M	V. Houtchens (206) 882-8348
Migent, Inc. 865 Tahoe Blvd. P.O. Box 6062 Incline Village, NV 89450	In-house Accountant Migent Pocket Modem	Small Business	M	Scott Walchek (702) 832-3700
Miles Computing, Inc. 7741 Alabama Avenue #2 Canoga Park, CA 91304	Mac The Knife Series The Fool's Errand Harrier Strike MissionII	Graphic Entertainment	В	Brett Miles Paul Mithra (818) 341-1411





Marketing and Sales Information

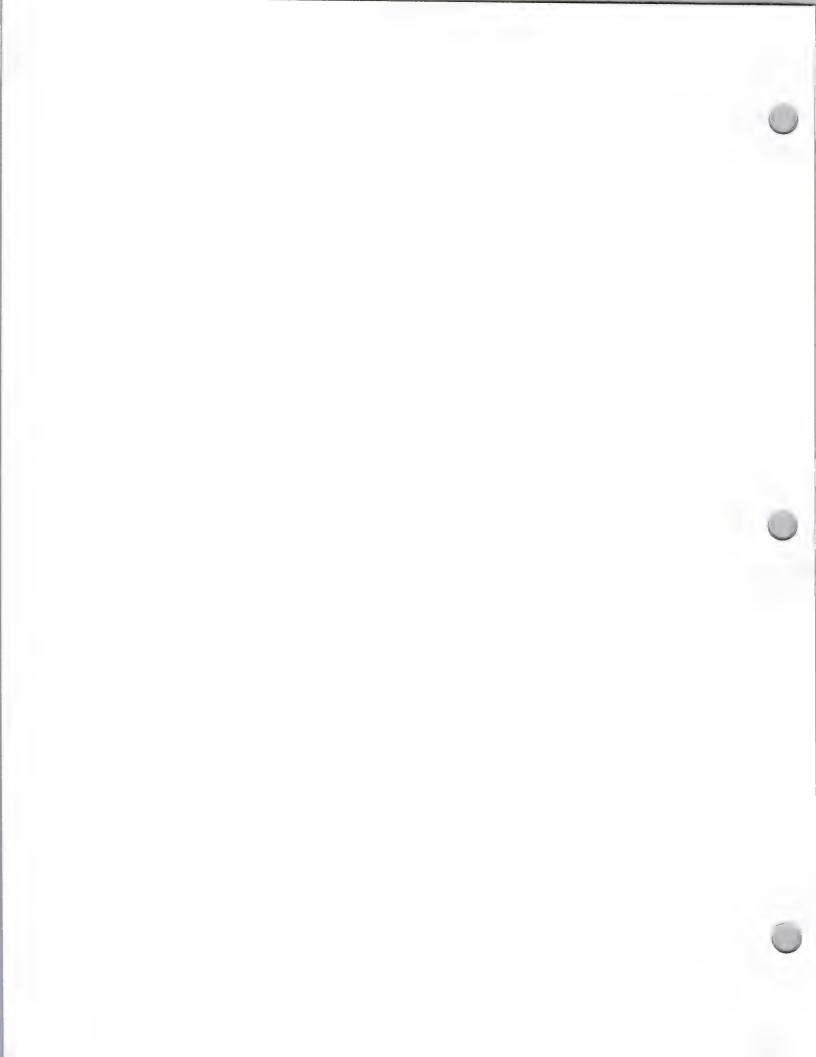
Company	Current Products	Focus	Machine*	Contact
Milliken Publishing Co. 1100 Research Boulevard P.O. Box 21579 St. Louis, MO 63132-0579	Writing Workshop WordMath Math Sequesnces Medley Desktop Pub.	Educational Managed, K–12 Curricular Courseware Comprehension Courseware	A onnect.	Chuck Eisenberg (314) 991-4220 (800) 643-0008
Modern Curriculum Press 13900 Prospect Rd. Cleveland, OH 44136	MicroPower Reach for Reading	Educational: Elementary, 1–6 Curriculum	A	Chris McArtor (216) 238-2222
Monogram 531 Van Ness Avenue Torrance, CA 90501	Dollars and \$ense Forecast Business Sense	Home and Small Business Productivity	В	Brad Peppard (213) 533-5120
Mosbysystems The C.V. Mosby Company 11830 Westline Industrial Dr. St. Louis, MO 63146	Microinstructor Nursing CAI Nurse Star Nursing Research CAI Vital Sign & Physical Assessment	Educational: Higher Education	A	Thomas Lochhaas (314) 872-8370 (800) 325-4177
Novation, Inc. 32 So. Wendy Drive Newbury Park, CA 91320	Modems	DataCom	В	Bob Crawford (800)848-MODM (800)499-8942
Notable Software 1473 Makefield Road Yardley, PA 19067	Musical Match-up Note Trespassing Geography Scramble	Educational Consumer	В	Rebecca Mercuri (215) 736-8355
Omnisoft Intnl. Ltd. 48 So. Service Rd. Ste.100 Melville, NY 11747	MOM: The Macintosh Office Manager	Desktop Publishing	M	Marc C. Mandel (516) 367-8618
Osborne/McGraw-Hill 2600 Tenth Street Berkeley, CA 94710	Books: Mastering the Macintosh Toolbox Apple IIc User's Guide	Programming Productivity	В	Ruth Holzman (415) 548-2805
PBI Software 1163 Triton Drive Foster City, CA 94404	Strategic Conquest Tower of Myraglen Visualizer Alien Mind MonteCarlo	Consumer Small Business HyperCard Entertainment	В	Will Low (415) 349-8765





Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
Palantir Software 12777 Jones Road Suite 100 Houston, TX 77070	InTalk MacType Math Flash Word Play	Retail products Entertainment	M	Mr. Bilby (713) 955-8880
Pelican Software 768 Farmington Avenue Farmington, CT 06032	Monster & Make Believe Super Print, Dinasaur Days Creation-The Animation System Reading Riddles With The Boars	Consumer Educational	A	Joel Fried (203) 677-6288 800-247-4641
Pergamon Software 395 Saw Mill River Road Elmford, NY 10523	Manuscript Manager: APA style, CBE style	Educational: Higher Education Secondary Level	В	Kim Cavellero (914) 592-7700
Polarware 1055 Paramount Pkwy., # A Batavia, IL 60510	Transylvania Electric Crayon Deluxe. Electric Crayon Series Spy Adventures Around the World Comprehend Interactive Graphic Adventures	Entertainment, Education, Graphic Utilities	B	Steve Greene (312) 232-1984
Practical Computer Applications, Inc. 1305 Jefferson Highway Champlin, MN 55316	MacGolf MacCourses MacRacquetball Lunar Rescue	Entertainment Road Racer	M	Mike Lange (612) 427-4789
QED Information Sciences 170 Linden Street P.O. Box 181 Wellesley, MA 02181	Typing Made Easy Typing Skills Builder	Educational: 7–12 College Home Business	В	Edwin F. Kerr (617) 237-5656
Quality Software 21610 Lassen St. #7 Chatsworth, CA 91311	Beneath Apple Manor Bag of Tricks 2 Beneath Apple ProDOS®	Utility Books	A	Bob Christiansen (818) 709-1721
Quantum Micro Research 330 W 30th St., # 1003 New York, NY 10001	Quadhelp Swapfax Event Planner AppShell	Business Developer Tools	M	Nicolas Cianca (212) 629-5617
Queue, Inc. 562 Boston Ave. Bridgeport, CT 06610	GED Series Practical Grammar Series Practical Algebra Series Biofeedback MicroLab Experiments in Chemistry	Educational	В	Lyn Gadarowski (203) 335-0906





Marketing and Sales Information

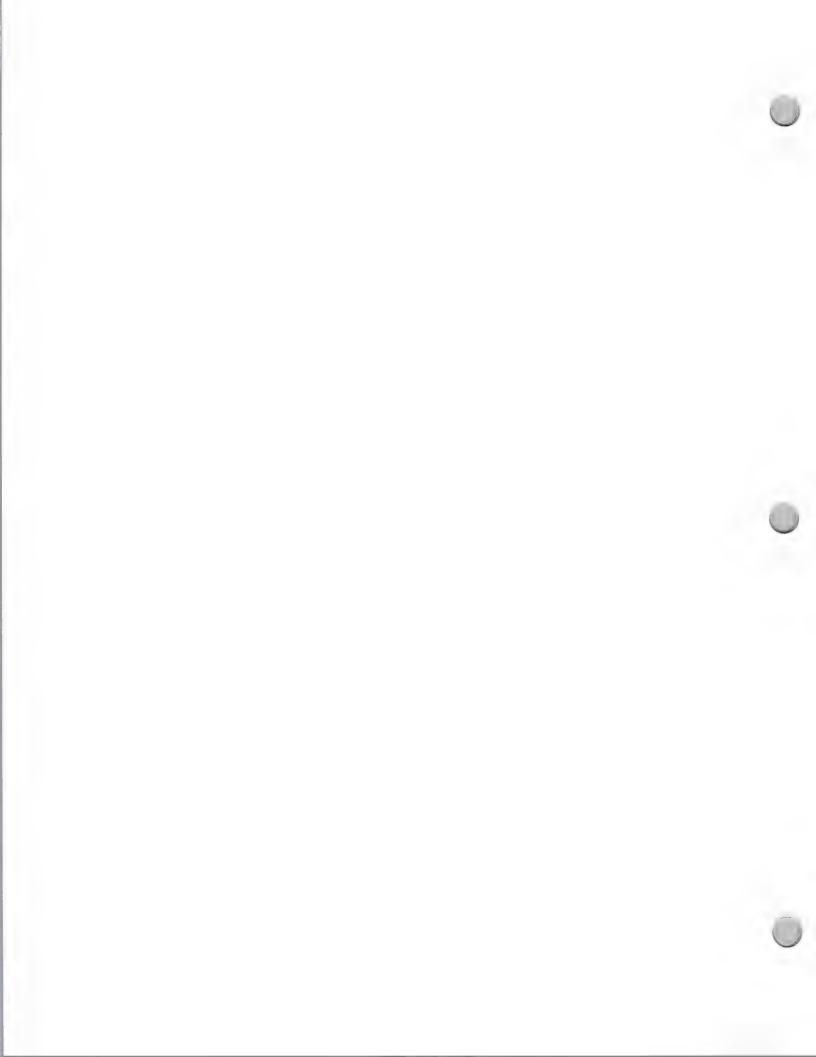
Company	Current Products	Focus	Machine*	Contact
Random House/School Div. 201 E. 50th St. New York, NY 10022	Charlie Brown Series // Write Information Focus Writing with the Boars Random House Young Writers Workshop	Educational: K–12	Α	Richard Casabonne (212) 572-4961
Richard D. Irwin The Atruim 500 N. Central Expy #550 Plano, TX 75074	Computerized Bus. Stats Microcomp. Study Guide CompuTest II	Educational: Bus. Schools	A	Dale Brown (214) 422-4389 x327
Roger Wagner Publishing 1050 Pioneer Way Suite P El Cajon, CA 92020	MouseWrite MerlinPro SoftSwitch Merlin 8/16, MacroMate	Consumer Utilities Home Ed	A	Garland Buckingham (619) 442-0522
Scholastic Incorporated 730 Broadway New York, NY 10003	Mathshop-Algebrashop Success with Writing Talking TextSpeller Slideshop, SuperPrint	Educational: K-12, College	Α	Paula Weinberger (212) 505-3556
Scott Foresman & Co. Professional Pub. Group 1900 East Lake Ave. Glenview, IL 60025	Books: MacWord Curriculum-based	Productivity Business Educational	В	Amy Davis/Dee Lee (312) 729-3000
Sensible Software 335 E. Big Beaver Suite 207 Troy, MI 48084	Bookends, Sensible Writer Sensible Speller Report Card Sensible Grammer	Productivity	В	Roger Tuttleman (313) 528-1950
Seven Hills Software Corporation 2310 Oxford Road Tallahassee, FL 32304	QuickTests The Character Factory LittleJack GraphicWriter	Education Consumer	Α	Earl Childers Dave Hecker (904) 576-9415
Sierra On-Line Inc P.O. Box 485 Coarsegold, CA 93614	KingQuest III Homework Plus	Arcade Adventure Educational	В	John Williams (209) 683-6858
Sir-Tech P.O. Box 245 Ogdensburg, NY 13669	Wizardry Clan Practical Account.	Entertainment Personal Prod.	В	Glenda Jones (315) 393-6633
Softview, Inc. 4820 Adohr Lane, Suite F Camarillo, CA 93010	MacinTax MacinUse MacinTax-Tax View	Business	В	Susan Morgan (805) 388-2626





Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
Software Resources Int'l 333 W. El Camino Real, #222 Sunnyvale, CA 94087	Solitaire Royale Pharaoh's Revenge	Consumer Entertainment Education	В	Dick Aldrich Software Producer (408) 738-4311
Software Ventures 2907 Claremont Avenue Suite 220 Berkeley, CA 94705	MicroPhone 1.1 MicroPhone II	Business Applications	M	Sylvia Paull (415) 644-3232
Southeastern Software 7743 Briarwood Dr. Berkeley, CA 94705	MAC-Transfer Datacapture IIe Spin & Spell The Movie Stack Communications	Verticals Utilities Education	В	George McClelland (504) 246-8438
South-Western Publishing Co. 5101 Madison Road Cincinnati, OH 45227	Apphebetic Keyboarding Automated Acct. for the Micro-Computer	Vocational Business Education	A	Dennis Kokoruda (513) 271-8811
Spectrum Holobyte 2061 Challenger Drive Alameda, CA 94501	Gato F-16 Fighting Falcon PT-109, Tetris	Entertainment	В	Carla-Tech Support (415) 522-3584
Spectrum Software 1021 Wolfe Road, Suite 130 Sunnyvale, CA 94086	MicroCap // Circuit Analysis Program MicroLogic	Engineering	В	Karen Burchfiel (408) 738-4387
Springboard Software Inc. 7808 Creekridge Circle Minneapolis, MN 55435	The Newsroom Certificate Maker Easy as ABC Springboard Publisher Early Games for Young Children	Education Productivity Home & Sm. Bus.	В	Mark Dunn (612) 944-3915
Spinnaker Software 1 Kendall Square Cambridge, MA 02139	Education Kinder Comp Gold Face Maker Gold Kids on Keys SAT Complete	Education Productivity	В	Lynne Weiss (617) 494-1200
Star Cor J.V. 333 Guadalupe, Suite 600 Austin, TX 78701	SongPainter	Consumer Business	M	Mike Frost (512) 499-8362





Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
State of the Art, Inc. 3545 Howard Way Costa Mesa, CA 92626	Electric Checkbook	Serious Home Business Productivity	M	George Riviere (714) 850-0111
Strategic Simulations, Inc. 1046 N. Rengstorff Ave. Mountain View, CA 94043	Advanced Dungeons & Dragons Computer Products	Consumer Entertainment	В	Linda Blanchard (415) 964-1353
Styleware, Inc. Divison of Claris 5250 Gulfton, Suite 2-E Houston, TX 77081	MultiScribe MultiScribe GS Topdraw	Business Education Consumer	A	David MacDonald (713) 668-4046
Sunburst Comm. 39 Washington Avenue Pleasantville, NY 10570	Magic Slate II Type II Learn Bank Street Schl. File Geometric Supposers Muppet Learning Keys	Education	В	Marge Kosel (914) 769-5030 800 431-1934
Symmetry Corporation 761 E University, Suite E Mesa, AZ 85203	PictureBase, Acta HyperDA, HyperEngine Acta Advantage	Productivity Graphics	M	Scott Shwarts (602) 844-2199
Temporal Acuity Products 300-120th Ave NE, Bldg.1,#20 Bellevue, WA 98005	Micro Music S/W Lib. Music Printer	Music Education K-University	A	J. Roger McRea (206) 462-1007
The Avalon Hill Game Co. 4517 Harford Road Baltimore, MD 21214	Darkhorn Under Fire Guderian	Entertainment Education	A	Vonna R. Weekly (301) 254-9200
The Voice Connection 17835 Skypark Cr., #C Irvine, CA 92714	IntroVoice I IntroVoice II	Business Education Disabled	A	Sharla Cartwright (714) 261-2368
Think Educational S/W 16 Market Street P.O. Box 5077 Potsdam, NY 13676	MacEdge, MacEdge IIGS Mind Over Mac MacEdge II MacEdge Plus	Education Entertainment Higher Education Productivity	В	Gregory Berkin (315) 265-5636
T/Maker Graphics 1390 Villa St.E Mt. View, CA 94041	ClickArt™ Publications ClickArt™ Effects WriteNow for Mac ClickArt™Personal Graph. ClickArt™Business Images	Business Consumer Educational Desktop Publ.	M	Andy Jeffrey (415) 962-0195
TML Systems 8837-B Goodsby Executive Dr. Jacksonville, FL 32217	TML Pascal II, TML Basic TML Source Code Lib. TML Speech Toolkit TML Source Code Lib. II	Consumer Educational	В	Bob Leonard (904) 636-8592

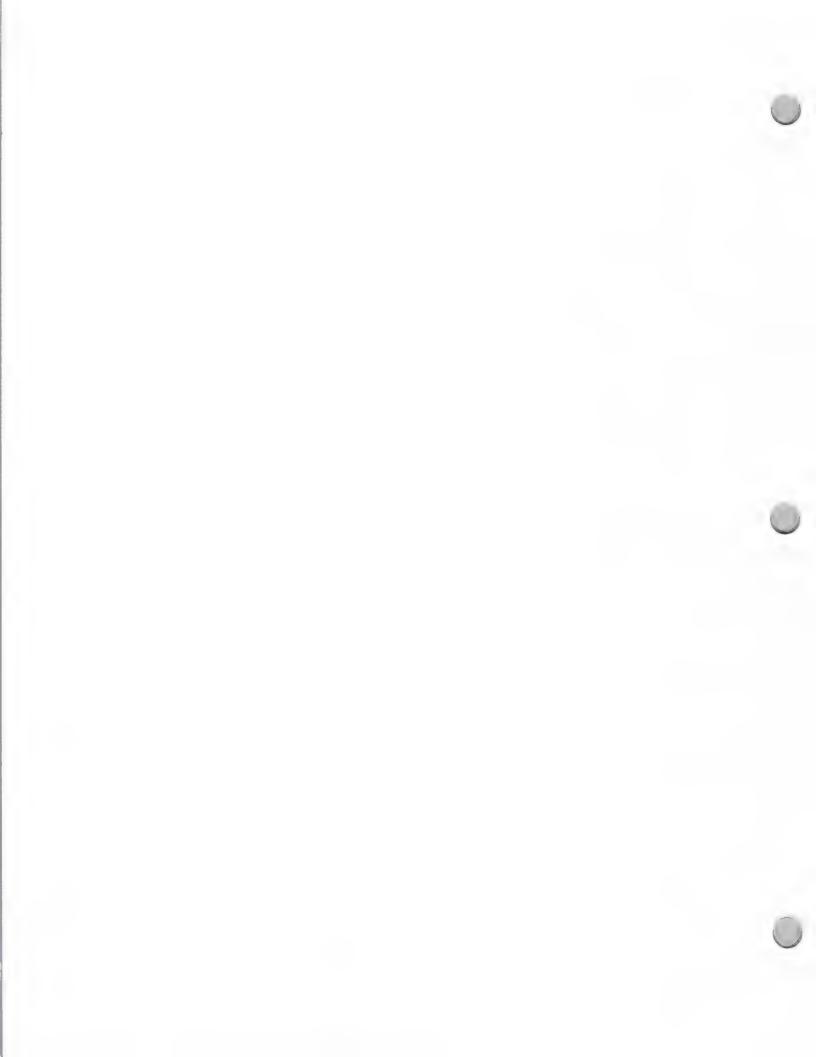




Marketing and Sales Information

Company	Current Products	Focus	Machine*	Contact
Turner Data Systems 17885 Sky Park N, # E Irvine, CA 92714	Business Acct. Series Production Control Fund Accounting	Business Productivity	M	Paul Owens (714) 261-5094
Unicorn Software 2950 E. Flamingo Road Las Vegas, NV 89121	Animal Kingdom Read-A-Rama	Educational	В	June Stark (702) 737-8862
Wadsworth Publishing 10 Davis Drive Belmont, CA 94002	Calculus Illustrated Hands on Statistics	Educational: College	A	Corp. Marketing (415) 595-2350
Working Software P.O. Box 1844 Santa Cruz, CA 95061	Spellswell -Legal Dictionary -Medical Dictionary Fineswell Workup	Business Productivity Utilities	M	Dave Johnson (408) 423-5696
William K. Bradford 594 Marrett Rd. Lexington, MA 02173	Explore Story Read, Write & Publish Explorer Science Math World Heath Mathmatics Software	Education K-12	A	Phil Thompson (617) 862-2570

^{*} A = Apple II products only, M = Macintosh products only, B = will consider both





Telemarketing Tips

Marketing and Sales Information

February 1, 1987

Telemarketing makes it possible to approach every potential customer with a prepared, predetermined, standard copy message. At the same time, it retains maximum flexibility to respond to each prospect's individual needs. This ability to listen and respond to the prospect's questions or concerns is the major advantage offered by telemarketing. In no other form of promotional communication does the medium so profoundly influence the message. Another important advantage is that telemarketing is extremely cost-effective. A salesperson can contact only a handful of potential customers per day, but the typical telemarketer makes 20 to 25 calls an hour and reaches the person he or she wants on 8 to 12 of those calls.

Telemarketing, an Effective Business Tool

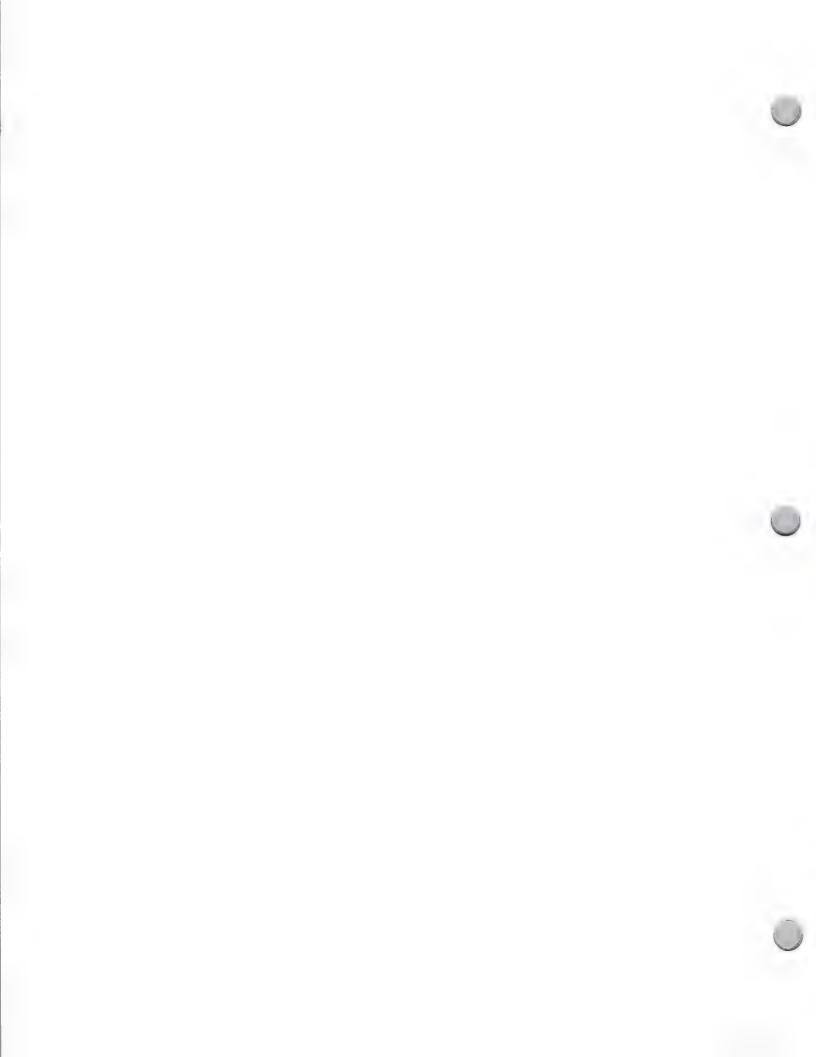
Telemarketing is a tool halfway between media and field sales. Although you cannot show the product as in field sales, it still carries a personal touch and provides instant feedback that's not available from print or broadcast advertisements. Telemarketing gives you the opportunity to:

- Follow up on prospects who have shown an interest in your product.
- · Convert inquiries into sales.
- Reactivate/Upgrade old customers.
- · Find and screen new business.
- · Reach distant customers.
- Reach more customers in less time.
- · Receive direct response inquiries to advertised offers.

Telemarketing Techniques

Listed below are some key telemarketing techniques:

- Prepare a list of your prospect's possible objections and questions, along with your answers.
- Begin by identifying yourself no matter who answers the phone. You will build goodwill and possibly gain another customer.
- Respect the other person's time. The telemarketing techniques combine salesmanship with simple conversational courtesy. If it's obviously not a good time, inquire about a more convenient time and close the call promptly.
- Visualize the person and speak directly.
- State your reason for calling—the more quickly you get to the point, the more receptive the listener will be.
- Ask questions. "What questions can I answer that will make your buying decisions easier?"
- Ask for the appointment. When you've satisfied your customer's questions and overcome problems, set up an appointment to accomplish your selling objectives.
- Listen to the answers. Don't interrupt. When it is your turn to speak, let your response show that you've heard and understood the customer's problems.
- Summarize the conversation. Review the pertinent information and have the customer review it.





Telemarketing Tips

Marketing and Sales Information

February 1, 1987

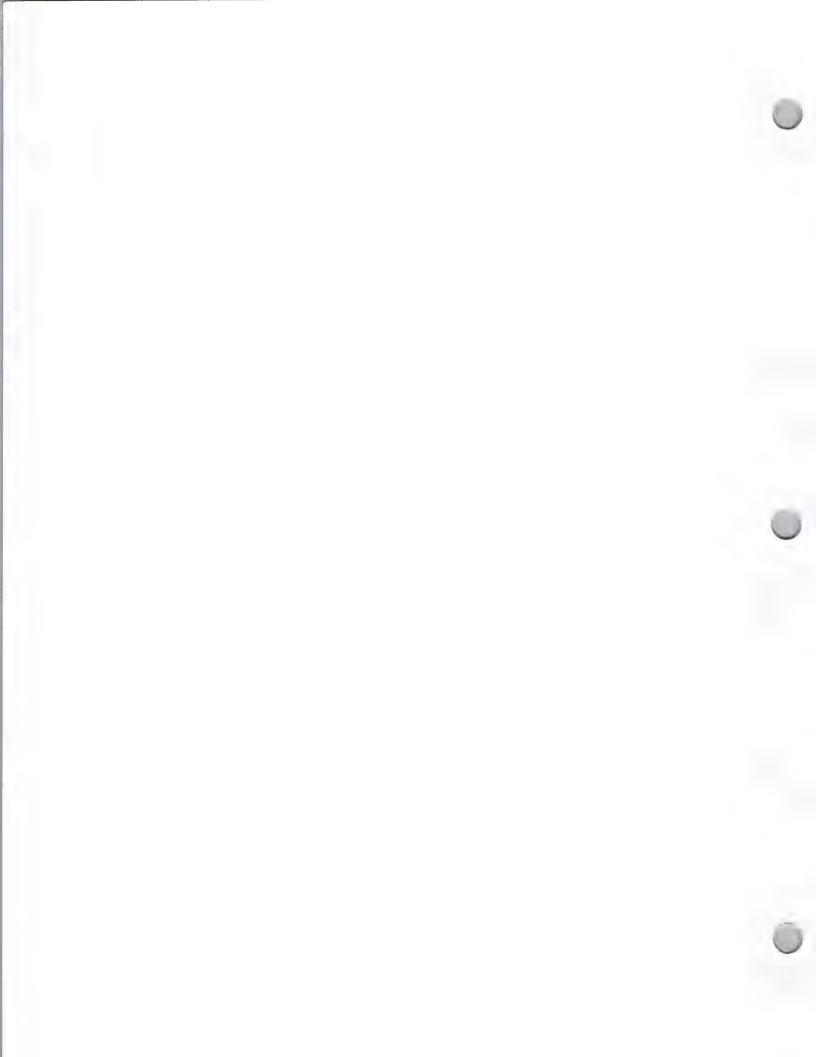
•Send a letter or note to follow up on the conversation.

Maximizing Results

Here are additional tips to help you make the most of telemarketing:

- Keep track of your telemarketing efforts. Keep a current data base on your followup list. Use the data base to note the time, date, and outcome of each telephone conversation.
- Don't get overly technical and intimidate a prospect with high-tech jargon over the phone.

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Resource Center

Marketing and Sales Information

October 1, 1988

What Is the Third Party Marketing Resource Center?

The Third Party Marketing group has established a Third Party Marketing Resource Center, designed to help developers make their products known within the Apple community. The Resource Center assists third parties in several ways:

• It provides greater exposure of third party products to Apple sales and marketing groups.

• It simplifies procedures for copromotions and other marketing projects, by providing one central location for third-party materials.

• It provides Apple with information regarding training materials, tutorials, and identified training organizations that relate to third party products.

• It allows product demonstrations in a setting with the latest peripherals and Apple® equipment.

The Third Party Marketing Resource Center is in a central location where all members of the Apple Sales and Marketing staff can access and work with third party products and materials. Materials at the Resource Center include third party software programs, demos and tutorials, product boxes and literature, screen shots and product slides, product reviews, and specialized hardware and peripherals. These materials are used in various sales and marketing programs, promotions, trade shows, and events.

A third party product viewing area has also been established. Here, different product demos run during office hours, constantly providing new product exposure. Staff members are encouraged to evaluate the products and materials on the Apple II and Macintosh® computers available in the Resource Center, and may also borrow them for up to 7 days. Legal agreements not to copy the software are signed by all staff members who borrow programs.

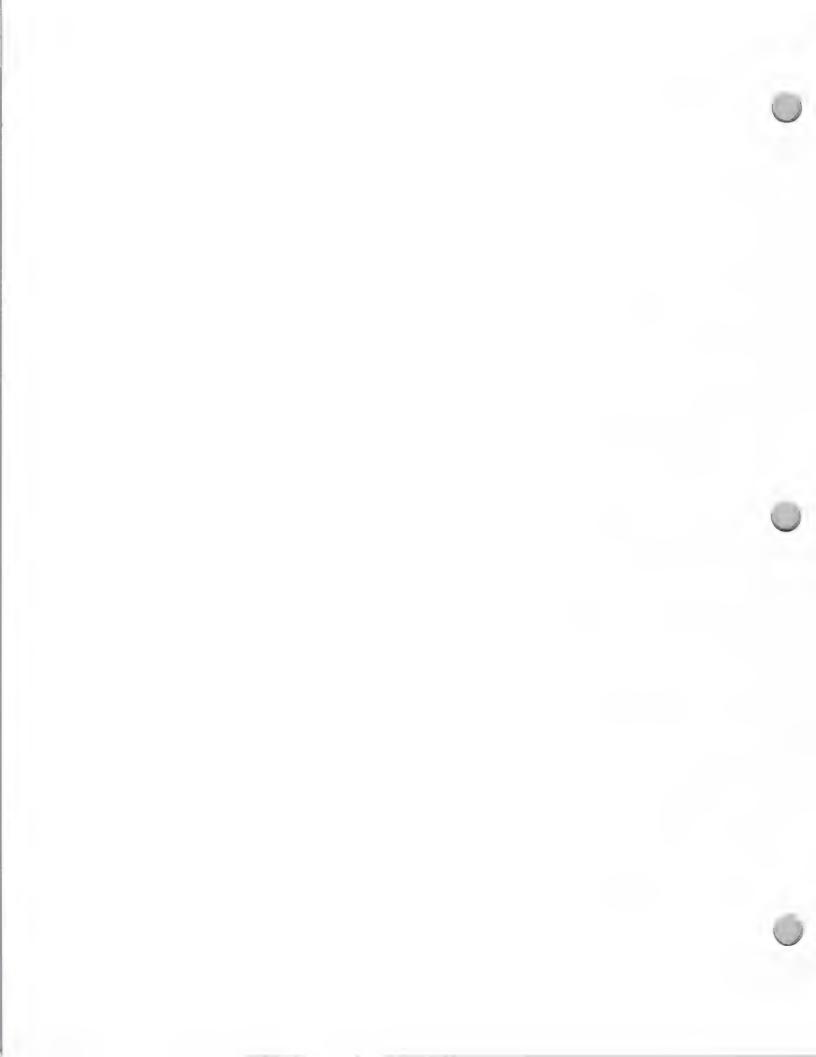
Because of space restrictions, we are limited as to the number of products we can include in the Resource Center. Products are selected based on the following criteria:

- Testing
 - —overall quality
 - —compatibility with Apple products
 - —adherence to Apple's human interface guidelines
- Consistency with Apple's marketing needs

How You Can Get Involved

If you would like to have your product(s) considered for inclusion in the Third Party Marketing Resource Center, please send the following materials:

- 2 copies of the latest version of each product (one copy will be tested by Apple's Promotional Testing group; the other will be reviewed by a designated person in Apple's Third Party Marketing Group)
- 1 product brochure
- 1 completed product data sheet for each product (see page 3)
- Product reviews





Resource Center

Marketing and Sales Information

October 1, 1988

Please send these materials to:

Apple Computer, Inc. 20330 Stevens Creek Blvd., M/S 36AA Cupertino, CA 95014 Attention: Laura Haase-Yamada

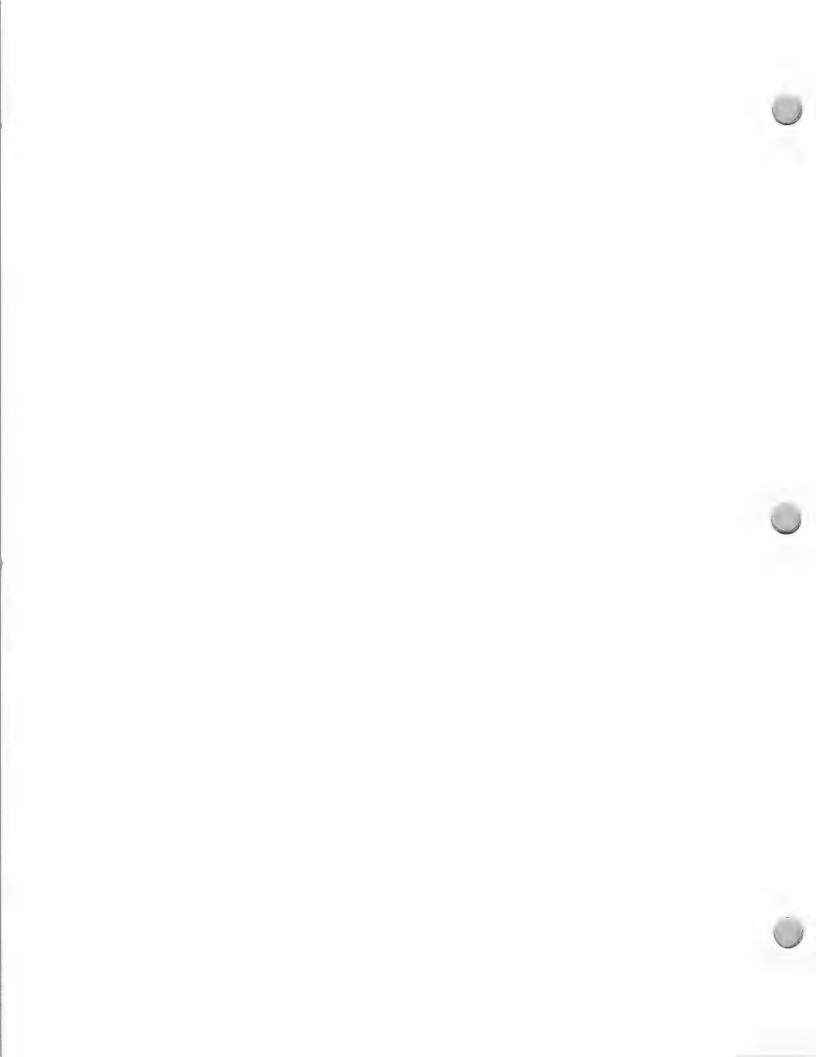
If it is decided that your product will be included in the Resource Center, you will be asked to provide us with the following:

- Software
- · Demos and tutorials
- · Product boxes and literature
- · Screen shots and product slides
- Product reviews
- · Specialized hardware and peripherals

Test results and determination of eligibility will be sent to all applicants within 45 days.

If you have any questions, please contact Laura Haase-Yamada at AppleLink®: HAASE1 or write her at the address given above.

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User Groups

Marketing and Sales Information

October 1, 1988

What is a user group?

Apple defines a user group as an affiliation of Apple users dedicated to enhancing the use of their Apple systems by sharing information, support, and insights. Most user groups as affiliated with a particular geographic community, but you can also find user groups in universities, colleges, and businesses.

User groups do not exclude any individual from participating, regardless of product interest or ownership. Nonmembers should be able to attend meetings or participate in group events, at least on an introductory basis. Not only is this Apple's position, it reflects the position of most universities and colleges in sanctioning internal club activity.

There is only one guideline regarding user groups that Apple holds sacred: Any user group wishing to be recognized by Apple Computer must support the licenses and restrictions applicable to commercial software. For years, user groups were viewed in the industry as "dens of piracy" (because they promoted unauthorized duplication of commercial software). Today, Apple attests that our user groups actually help to combat software piracy by communicating the serious implications of this practice to their members, and preventing through by-laws and practice any copying of software within their group.

What is the purpose of a user group?

A user group provides the information users need to use their computers more efficiently. Many computer users are relatively new to the world of personal computers and are interested in learning not only how to use their computers, but also what third-party products are available to enhance their productivity. This information is not always readily available to end users, who often rely heavily on user groups to meet this need.

User group meetings generally focus on solutions to current needs and problems. Many groups have SIGs (Special Interest Groups) to discuss specific solution areas, such as music or medicine.

But user groups are not just for the highly experienced and technically minded user. Actually, the advanced users may need user group support less than newcomers, but they often become the backbone of the group and contribute greatly to the benefits gained by all new users.

Why should developers support a user group?

A user group can benefit you in many ways:

- The user group builds enthusiasm, as attendees hear others' success stories and discoveries concerning your products and solutions. Word of mouth is a strong sales tool, especially in the user group community.
- User groups maintain software libraries containing third-party demonstration disks. Many members go to their user group library instead of to a local dealer to learn about your products.





User Groups

Marketing and Sales Information

October 1, 1988

- Since user groups include members from the local community and, in some cases, students and faculty, you have extended your market outreach. Good news travels fast.
- Users are more confident in their ability to use your products, not only because they're better informed, but also because they know they have your support.
- User groups are an excellent resource for product evaluation. They are always willing and interested in providing feedback on existing products and making suggestions for future ones. Some companies have successfully used user groups to beta-test new products.

What is your role?

Your role in a user group is to inform and excite members about your products. As your relationship with user groups grows, you may find yourself coming to meetings periodically to discuss new products or other innovations. The net result is increased enthusiasm about your company and products—and therefore increased sales. Additionally, most developers enjoy the goodwill generated by an appearance at a user group meeting. User group members are valuable allies who will support a good product and who will, by the same token, give you important input from an end user's point of view.

How do you begin?

First, find out if a Macintosh user group already exists in your area by contacting the Apple User Group Connection at this address:

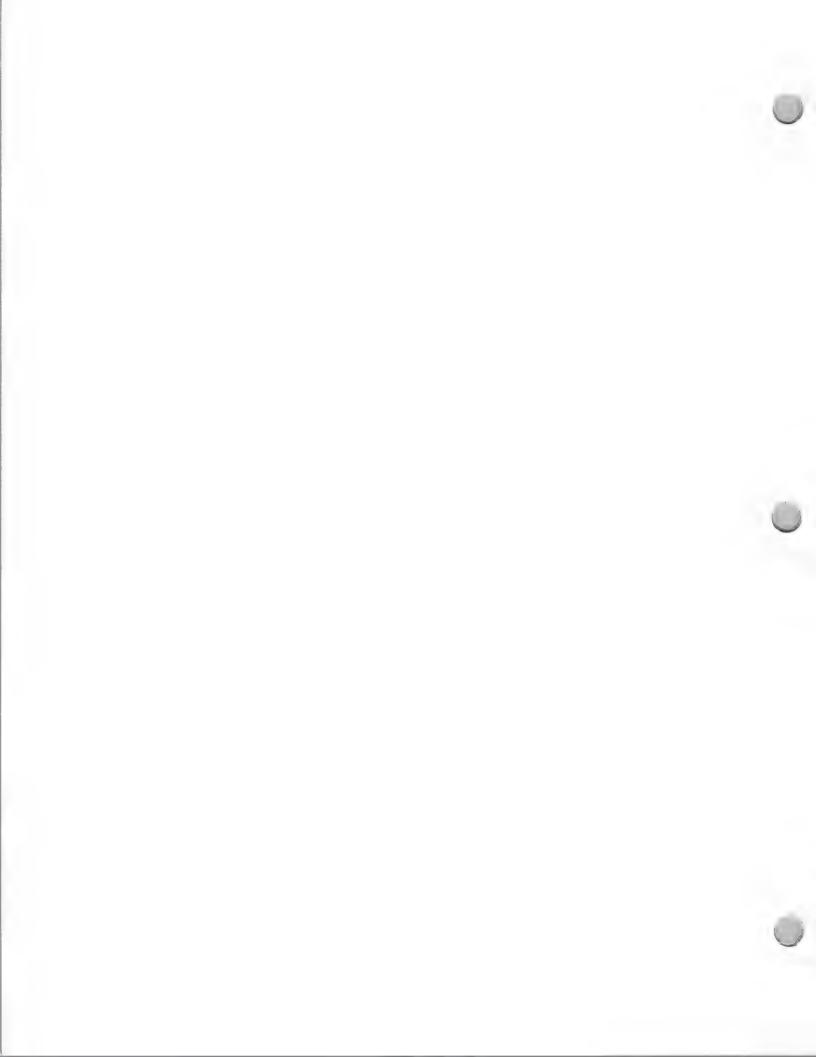
The Apple User Group Connection 20525 Mariani Avenue, M/S 36-AA Cupertino, CA 95014 AppleLink®: USER.GROUPS

User group meetings provide a useful way to contact lots of people at once. For example, after you locate your local user group, you might ask members to invite some college or university people for a "higher education" night. The group will probably be willing to help arrange this, because the event could draw in new members.

What happens at a user group meeting?

User groups generally meet once a month. The size of the group and the frequency of the meetings will affect their length and the material covered. Agenda items include:

- Presentations on third-party products and Apple products
- Presentations by a user group member or guest speaker on topics of general interest
- Discussion on specific technical ideas that are currently sparking a lot of questions or are expected to do so in the near future
- An open discussion
- Social time following the formal part of the meeting





User Groups

Marketing and Sales Information

October 1, 1988

Some developers have hosted an entire evening dedicated to their products. Included in the event are presentations on the product(s) followed by hands-on training sessions. Other creative ideas, such as having a drawing for one free software application, or donating a minimal stipend to the group, can go a long way to increase your visibility. For the amount of positive press you'll receive, the expenditure is minimal.

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Trade Show Tips

Trade Shows and Events

October 1, 1988

Trade shows give you the opportunity to present your products directly to customers in a strong selling environment. People attend a trade show because they are in the market to buy. The sales potential is enormous, which makes participating in trade shows extremely cost-effective. It can also be an effective method of improving awareness of your company's name. Before selecting a show to participate in, consider these questions:

• What are your goals?

• What products are you going to feature and sell? New products?

• What are the best markets for these products?

• What specialized solutions do you offer that appeal to the specific market?

• What is your budget?

- How many leads can you generate?
- How much business can you close?

Be Prepared

There is a trade show for practically every industry. Participate at the shows that attract your target audience. Check into a show's past performance record and get the answers to these questions:

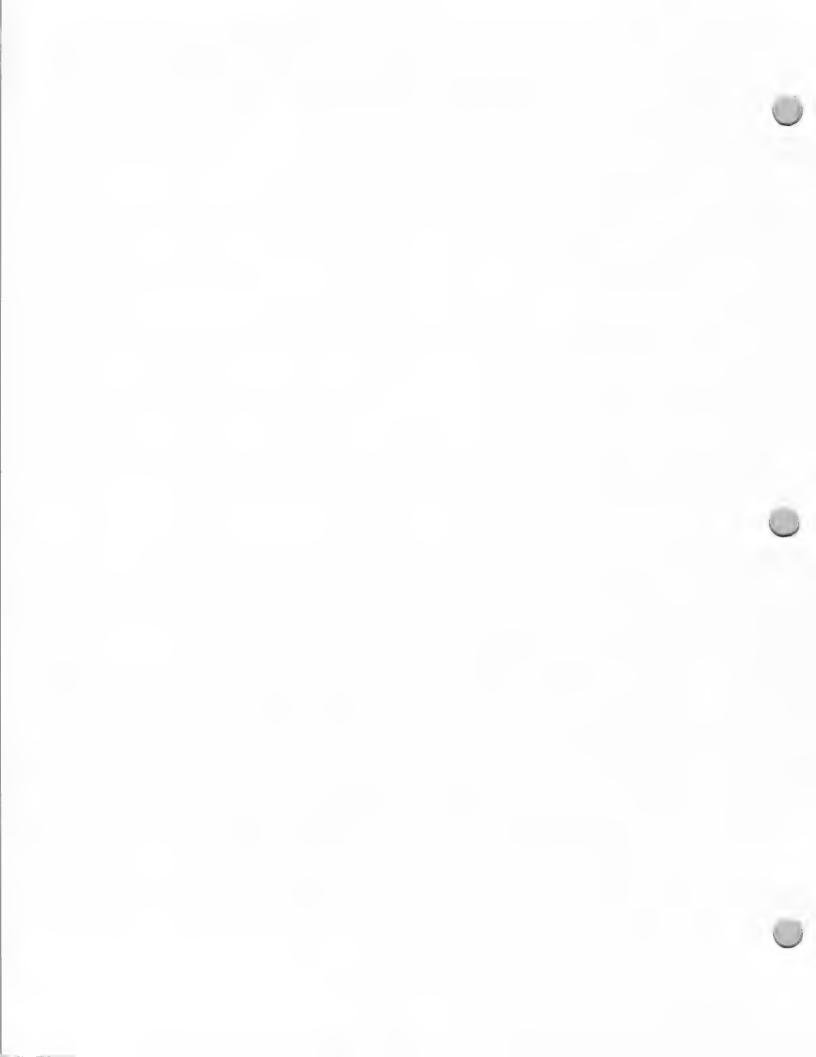
- What other companies will have booths at the show?
- How much money does the promoter spend on advertising?

• Where is the money spent?

Has attendance at the show consistently grown?

No matter how broad the scope of the show and audience, take careful steps in planning your display. Emphasize the products with the greatest application to the show's patrons.

- Display your latest products and newest technology. People expect to see what's new in their area of interest—that's part of the drawing power of trade shows.
- Have knowledgeable people on hand. The more serious the buyers, the more they need
 and expect clear and accurate answers. Make sure your representatives are highly
 knowledgable in the product you offer in addition to the profession of your target audience.
- Set up hands-on demonstrations. The chance to touch, see, feel, and work with a product first hand will catch a buyer's interest and help sway the purchase decision.
- Advertise your presence with prominently placed posters and have product literature available.
- Be prepared to write orders. Set up an organized point-of-sale system to handle transactions. Have extra people on hand at peak show times to handle the crowd.
- Gather sales leads and conduct a demographics study to track customers by region. At a
 nonselling show, establish a system for all your salespeople to follow to obtain prospects'
 names.





Trade Show Tips

Trade Shows and Events

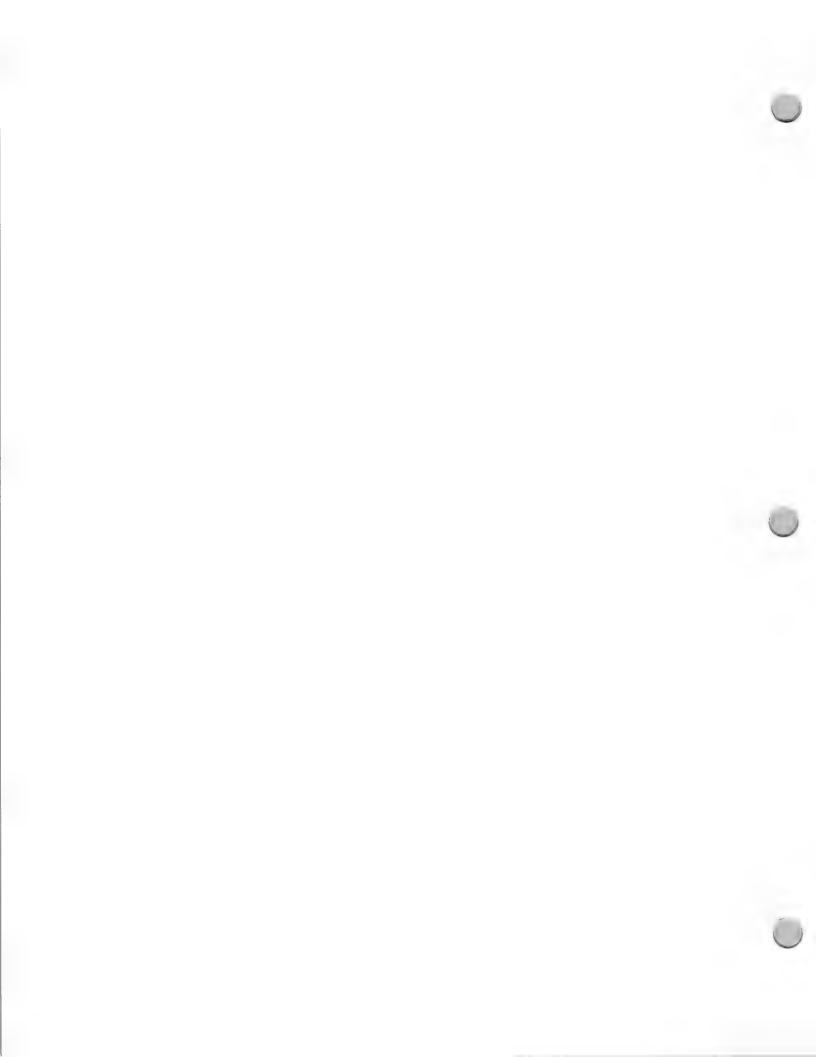
October 1, 1988

• Offer attendees "show specials" to give potential customers a reason to buy immediately.

Maximizing Results

Followup is the key to success in trade shows. If you don't follow up on the leads and prospects you've gained, you can't expect to close many sales. After the first day of the trade show, enter all attendees' names, addresses, phone numbers, and other data into your prospect data base. Send attendees a thank-you letter and let them know that you will call in a few days. Within five days of the show, call the prospects and offer assistance assessing their specific needs.

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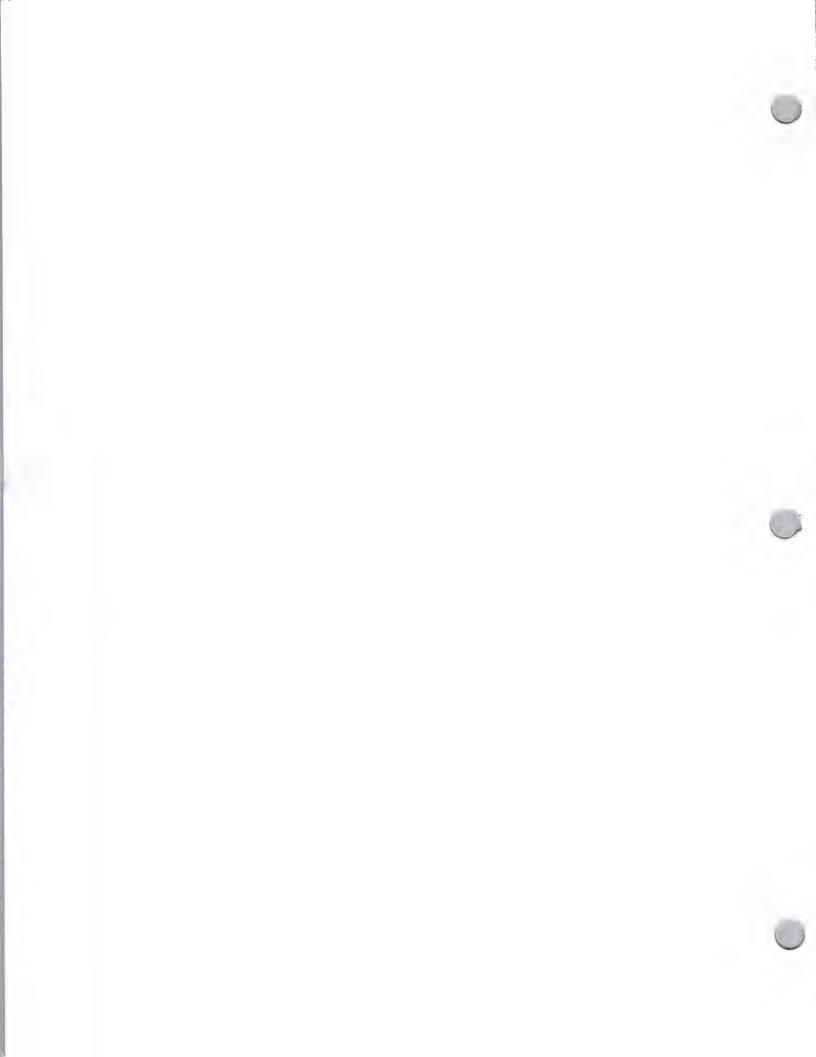
Business Trade Shows

Trade Shows and Events

October 1, 1988

Apple will have a booth at the following trade shows and conferences (please note that this 1988 schedule is subject to change). To secure your own booth, please contact the show manager directly.

Dates	Show	Location	Attendance	Manager
Oct. 11	INFO '88	New York	50,000	Dave Sell (203) 964-0000
Oct. 18–20	DEXPO West	Anaheim	12,500	Hope Makransky (609) 987-940
Nov. 9-11	American Corporate Counsel Association	San Francisco	500	Sheila Bisset (202) 296-4523
Nov. 14–18	Comdex	Las Vegas	80,000	Ron Baker (415) 345-2620
Jan 19-22	MacWorld	San Francisco	50,000	Mitch Hall Assoc. (617) 329-8092
Feb. 8-10	DEXPO East	New York	10,000	Expo Counsul Int. (609) 987-9400
Feb. 27- March 1	Legal Tech	New York	5,000	Deb Jarczewski (212) 877-5619
March 13-17	Seybold Seminars	San Francisco	150	Kevin Howard (213) 457-5850





Eng/Sci Trade Shows

Trade Shows and Events

October 1, 1988

Apple will have a booth at the Engineering and Scientific trade shows listed below. Please contact the show manager to secure your own booth. Note that the following trade show schedule is subject to change

Dates	Show	Location	Attendance	Manager
Oct. 31- Nov. 2	Unix Expo	New York	15,000	Don Berey (212) 391-9111
Oct. 30 - Nov. 2	AUTOFACT '88	Chicago	25,000	Jill Vanderlin (313) 271-1500
Feb. 28 March 2	Uniforum '89	San Francisco	10,000	Heidi Thorne (312) 299-3131
April 17-20	National Computer Graphics Assn.	Philadelphia	30,000	Martha Filson (703) 698-9600
June 6-8	AEC	Anaheim	35,000	George Borkovich (215) 444-9690





Government Trade Shows

Trade Shows and Events

October 1, 1988

Apple will have a booth at the government conferences that are listed below. Please contact the show manager to secure your booth. This trade show schedule is subject to change.

Dates	Show	Location	Attendance	Manager
Sept. 24-29	American Public Works Assoc.	Toronto	8,000	Lauren Connors (312) 667-2200
October 23–25	Int'l City Managers Assoc.	Charlotte	500	Debra Mayer (703) 471-5761
Dec. 4-6	Congress of Cities	Boston	6,000	Elliot VanPatten (703) 471-5761





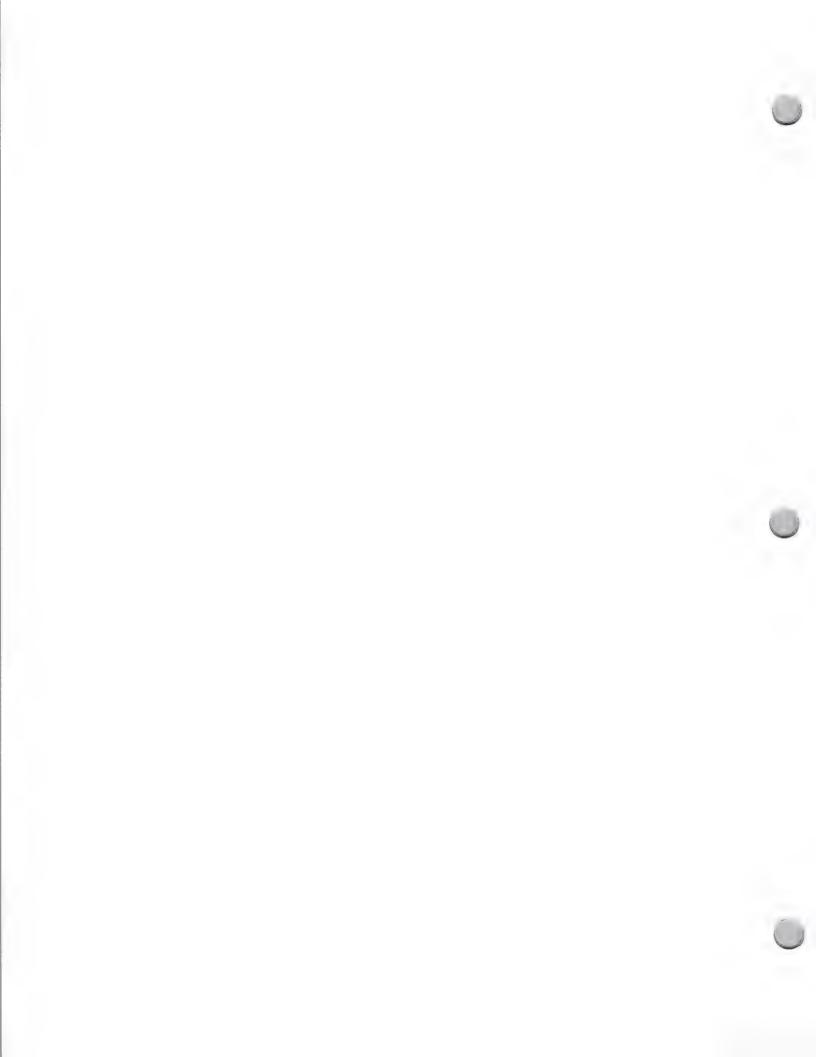
Higher Ed Trade Shows

Trade Shows and Events

October 1, 1988

Apple will have a booth at the Higher Education trade shows listed below. Please contact the show manager to secure your own booth. Note that the following trade show schedule is subject to change. The following trade shows will take place in 1988 and/or 1989.

Dates	Show	Location	Attendance	Manager
<u>1988</u>				
June 21-23	USENIX	San Francisco, CA	7500	John Donnelly (303) 499-2600
October 25-28	EDUCOM	Princeton, NJ	1700	Kathy Schaible (609) 320-3317
October 23-26	League for Innovation	Toronto, Canada	1000	Don Doucette (714) 855-0710
<u>1989</u>				
March 15-18	Committee for College Composition and Communication (CCC)		2600	Jacqui Joseph (217) 328-3870
June 25-29	American Society for Engineering Education (ASEE)	Lincoln, NE	3000	Lorretta Young (202) 293-7080 x305
October 29- November 1	League for Innovation	St. Lois, MS	1000	Don Doucette (714) 855-0710
November 18-23	National Council Teachers of English	St. Lois, MS	5000	Jacqui Joseph (217) 328-3870





K-12 Trade Shows

Trade Shows and Events

October 1, 1988

Apple will have a booth at the K-12 educational trade shows listed below. Please note that this schedule is subject to change.

Dates	Show	Location	Attendance	Manager
Nov. 10-12	ITTE - National School Board Association	Dallas	1,000	Cheryl Williams (703) 838-6213
1989				
Feb. 24-28	National Association of Secondary School Principles	New Orleans	7,000	John Kourmadas (703) 860-0200
March 3-6	American Association of School Administrator	Orlando rs	12,000	Peggy Foley (703) 528-0700
March 11-14	Association for Supervision and Curriculum Developmen	Orlando	20,000	Teola Jones (703) 549-9110
June 20-22	Computing Conference	Boston	3,000	Paul Katz (503) 686-3537

If you need additional information, or would like to participate in any of these shows, please send or AppleLink your requests specifying shows and software to:

Apple Computer, Inc., 20525 Mariani Avenue, M/S 36P Cupertino, CA 95014 Mary Planding

Attn: K-12 Trade Show Information

AppleLink: PLANDING1

For a complete listing of all educational meetings and conferences, you can contact Peter Li, Inc. for a 1989 Educational Meetings Calendar. He can be reached at (513) 294-5785. The calendars are \$5.00 each.



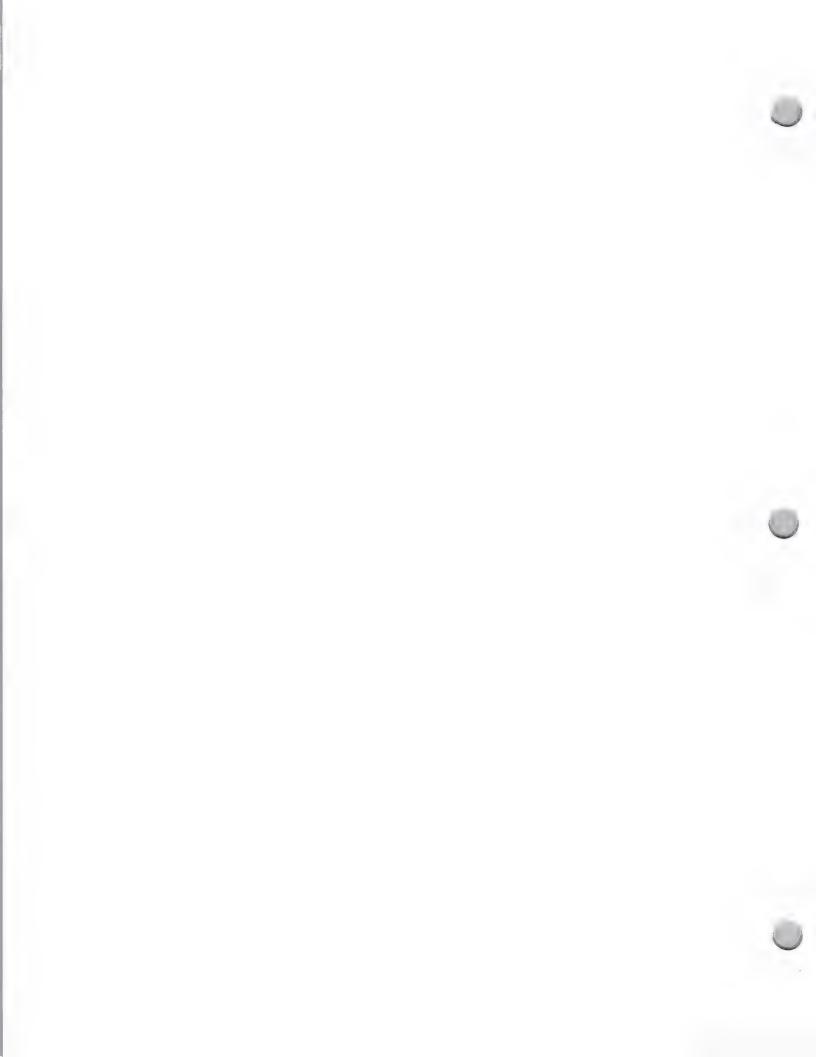


International Events

Trade Shows and Events

October 1, 1988

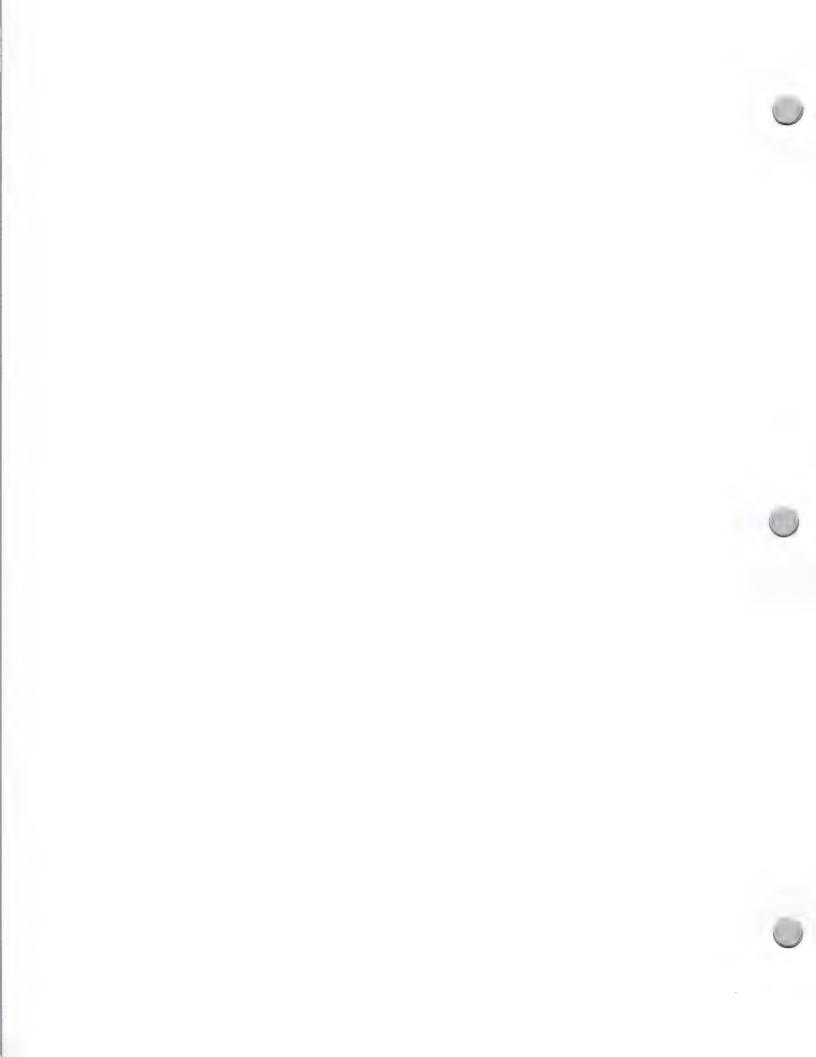
Date	Show	Location	Attendance	Contact
Sept. 6-10	Swissdata (Office Automation, D' Engineering)	Basel, Switzerland TP,	55,000	Urs Binder 41-1-830-5040 AL: IT0014
Sept. 14-15	Apple Forum (Large Accounts)	Ansbach, Germany	700	Achim Orleth 49-89-35034-140 AL: ORLETH1
Sept. 21-28	Bureau '88 Trade Fair	Brussels, Belgium	100,000	M .Bastin 32-2-753-6050
Sept. 24-28	Apple Forum (DTP, DTC & Educ.)	Karachi, Pakistan	5,000	Sohail Hammed Khan 92-21-528077 TLX:23356UDL PK
Sept. 27- 30	Datashow	Tokyo, Japan	150,000	Jun Azuma 81-3-224-7000 AL: AZUMA1
Sept. 28 - Oct.1	Apple Expo	Paris, France	50,000	C. Droulers 33-1-69-280139 AL: DROULERS1
Sept. 29 - Oct. 3	SMAU (Office Automation)	Milan, Italy	200,000	Luisella Vaghi 39-2-75741 ITA.ADV
Oct. 4-6	DecUser Show	London, England	5,500	Penny Watts 44-1-404-4844
Oct. 6-14	Efficiency Vakbeurs '88 (Office Automation)	8 Amsterdam, Netherlands	300,000	Mr. Heringa 31-20-5491212
Oct. 20-25	Orgatechnik (Office Automation)	Cologne, Germany	170,000	Mattina Patzelt 49-89-35034-106 AL: PATZELT1
Oct. 24	Apple & the year 2000 (Conference)	Vienna, Austria	400-500	Alfred Kutshcera 43-222-63-88-40 AL: A.SALES
Oct. 25-28	Systec (Engineering)	Munich, Germay	new event	Hans Gerke 49-89-35034-118 AL: GERKE1





International Events

Trade Shows	s and Events			October 1, 198
Nov. 3-5	MacWorld Expo	Sidney, Australia	6,000	Alan Tayt 61-2-959-5555 FAX: 61-2-959-5556
Nov. 8-10	MacUser Show	London, England	15,000	Tony Keefe 44-1-486-1951
Nov. 18-25	SIMO (Office Automation)	Madrid, Spain	200,000	P. Hidalgo de Caviedes 34-1-448-4794
Business Fori	um Events			
Date	Show	Location	Attendance	Contact
Sept. 1	Business Forum	New Delhi, India	new event	Rakesh Gandhi 91-11-651565 AL: IT0070
Sept. 3	Business Forum	Manila,Phillipines	new event	Wilfredo Lao 63-2-81-89343 AL: IT0102
Sept. 14-15	Business Forum	Singapore, Indonesia	new event	Ron Osmun 65-4683888 AL: IT0032
Nov. 15	Business Forum	Selangor, Malaysia	new event	Shukor Karim 60-3-4575402 AL: IT0033
AppleWorld	Events			ты. 110033
Date	Show	Location	Attendance	Contact
Sept. 28-30	AppleWorld DTP,DTC, & Apple future tech.	New Delhi, India	5,000	Rakesh Gandi 91-11-651565 AL: IT0070
Nov. 19	AppleWorld DTP & DTC	Agana, Guam	1,000	Carl Wegner 671-472-6208 AL: IT0057





Industry Events

Trade Shows and Events

October 1, 1988

We have compiled a schedule of domestic and international conferences, trade shows, seminars, and other events that pertain to the computer industry, including events that concern computer use in publishing, government, networking, market research, and business markets. If you are interested in shows such as DataQuest Electronic Publishing, National Institute on Government Purchasing, National Association of Countries, and American Hospital Association Meeting (computers and hospital administration), then this list will be particularly useful to you. It covers approximately 50 shows and is updated on a monthly basis.

For example, the information on each show is presented in the following format:

Date

Name/Description

Location

Contact/Phone

Price

(if available)

June 5-8

Leadership in 2001: Technology and

Boston

(617) 864-5770

Markets: Innovation/technology leaderships; strategies; alliances; technologies of the future; information

systems.

June 10-15 U.S. Conference on Mayors

Salt Lake City (202) 293-7330

If you would like to obtain this calendar of industry events, please contact:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51-W Cupertino, CA 95014 Attn.: Peggy Jensen Developer Programs

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Appledirect Newsletter

Advertising and Publications

October 1, 1988

Appledirect is a 24-page monthly newsletter which replaces *Outside Apple*. It is sent to all Apple Certified Developers and several hundred Apple employees in the Product Development and Marketing groups. The newsletter acts as a communications vehicle between Apple Computer and the developer community, covering both technical and marketing trends and issues. Most of the articles and columns are written by the staff, but Appledirect does accept certain types of outside contributions.

There are several ways in which developers can contribute to the magazine:

- Guest opinions (send query first)
- Letters to the Editor (250 words max.)
- Announcements/Contests
- Classifieds

Guest Opinions and Letters

Appledirect wants to hear from developers in the form of guest opinion pieces and letters to the editor. Tell us how we're doing with a letter to the editor (250 words or less), sent to the address below, or sound off with an opinion piece that would be of interest to your fellow developers. We request that potential authors of guest opinions please first contact Roger Dills (Roger's AppleLink address is DILLS1) or Lisa Raleigh (RALEIGH.L) to discuss the topic. Please limit your opinion submissions to about 600 words. Because of space constraints, we're able to only publish a limited number of letters and guest opinions. We reserve the right to edit for brevity, clarity, and Apple style.

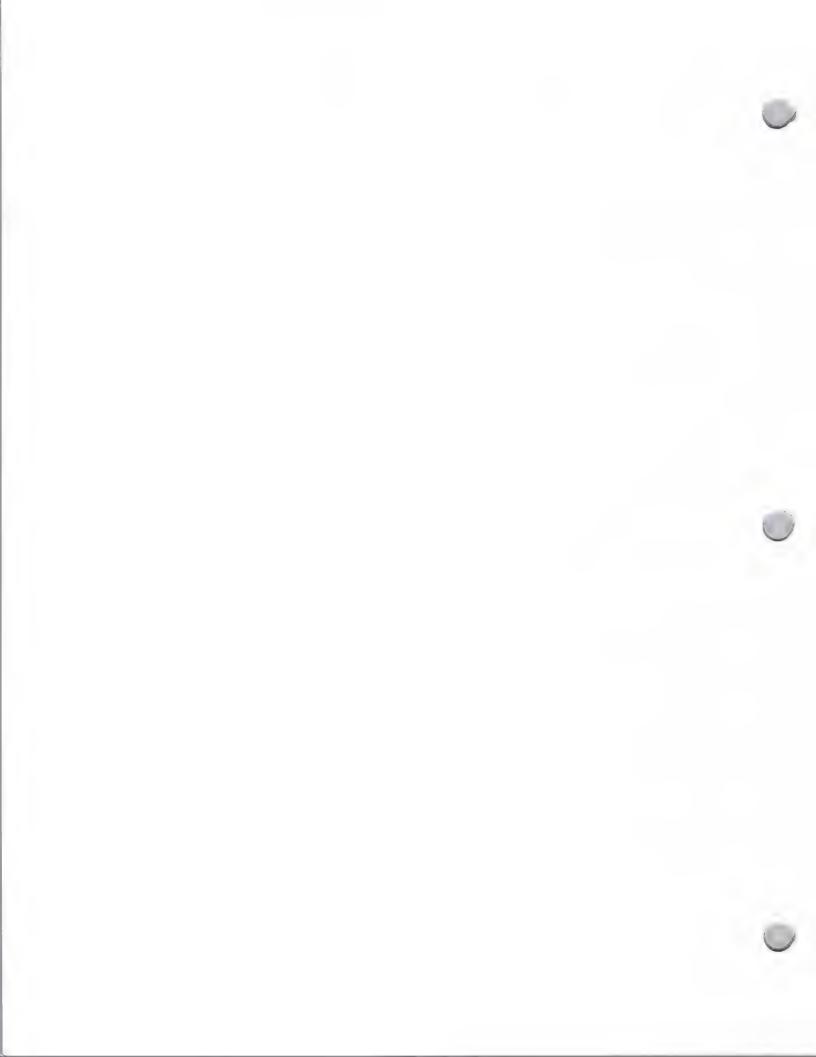
Announcements/Contests

You may post announcements that would be of interest to the developer community, such as product discounts to other developers, or descriptions of your developer programs. Contests may also be announced in the newsletter. Contact Julie Hicks-Herman; her AppleLink is HICKS1.

Classified Advertisements

Classifieds are for exchanging information, and can be used to find a publisher, sell a service, or anything else that might help you in your endeavors. Up to 40 words are accepted on a first-come, first-served basis. You can submit your classifieds on disk or send in hard copy to Julie Hicks-Herman or link HICKS1. The publication of classifieds is subject to space constraints.

Roger Dills, Editor Apple Computer, Inc. 20525 Mariani Avenue, M/S 51W Cupertino, CA 95014 Attn: Appledirect





Syllabus Newsletter

Advertising and Publications

October 1, 1988

Syllabus: An Information Source for Publishers in Higher Education is a 12-page quarterly newsletter that serves as a resource for publishers of Macintosh software and books.

Audience

Syllabus is sent to approximately 1,600 decision makers (executives, acquisitions or discipline editors, product and marketing managers, and sales directors) in the higher education publishing marketplace. It is also distributed to selected Apple employees in Marketing and Product Development, as well as to faculty members involved in Macintosh software development.

Syllabus provides market information that assists you in making decisions about publishing for the Apple® Macintosh personal computer. You'll find valuable information about individuals, firms, colleges, and people at Apple who are actively involved with use of the Macintosh on campus—and useful information that you can act on, such as software sources, events, new products, campus trends, and news items. You'll also learn what others are doing in higher education computing.

Content

Each issue contains the following regular features:

· Product Information

This section includes descriptions and articles on products that enhance both the instructional publishing processes, such as authoring systems, desktop publishing systems, high end publishing systems, testing and administrative solutions, optical storage, HyperCard enhancements and Stackware, courseware systems, etc.

Market View

This section includes market research information on the use of the Macintosh in higher education. Use of the Macintosh is discussed in terms of various disciplines, like engineering. General information is also provided on the Macintosh in education and business.

· Macintosh in Academics

This section provides examples of how the Macintosh is being used in colleges and universities to enhance the instructional process. It covers the integration of the Macintosh into various curriculum areas such as Business, Engineering, Computer Science, English Composition, Mathematics and the Sciences. It also includes examples of how software is being used in the classroom and individual learning situations to enhance the instructional process.

HyperCard

Each issue has at least one article on how to publish HyperCard stacks, as well as descriptions of innovative StackwareTM created by developers and universities, stories on new development approaches, and new marketing strategies.





Syllabus Newsletter

Advertising and Publications

October 1, 1988

Current News

This section includes information on releases of software and hardware products as well as sales successes. Here is your opportunity to announce the introduction of your new products.

· Resources

You will find information and inspiration for higher education publishing efforts in this section of *Syllabus*, such as listings of various resources including software catalogs, organizations, and innovative software programs that can be used to publish software and books. This is an ideal opportunity for you to gain visibility for your products.

The Macintosh Exchange

This column is devoted to higher education software developers and authors who are seeking a publisher in the higher education market; it has been responsible for connecting developers to publishers. Publishers will respond directly to you if they are interested in your listing.

How you can participate

There are several ways in which you can contribute to — and benefit from — Syllabus. First, please place Syllabus on your Press Release Distribution list. We will consider all relevant products for publication or incorporation into featured articles.

Second, you can gain visibility in the publishing community by writing an article for publication. We are interested in developments and trends in educational computing, multimedia, computing in specific curriculum areas and author productivity tools. Information you send may be incorporated into an existing article or might be the basis of a new article. Please be sure to query us before sending lengthy major articles.

If you would like your press release to be considered for inclusion in the *Syllabus* newsletter, please send your materials directly to the following address:

Syllabus P.O. Box 2716 Sunnyvale, CA 94087 Attn: John P. Noon, Editor

Free Subscriptions

We offer Apple Certified Developers a free subscription to our publication. If you would like to receive the latest issue, please contact us at the above address.





User Group Newsletter

Advertising and Publications

August 1, 1987

Apple's User Group Connection team publishes a monthly newsletter, called *Quick Connect*, for the 850 user groups currently known to Apple. The purpose of this newsletter is to keep Apple User Groups informed about Apple's people, products, and programs.

As an Apple Certified Developer, you have the opportunity to gain visibility for your products by submitting applications-oriented human interest stories to *Quick Connect* (unusual, inspirational articles focusing on a user and how he or she has benefited by using your product).

Procedure

If you would like your human-interest article to be considered for inclusion in Apple's User Group newsletter, we ask that you send Developer Programs a copy. All hardware and software used in the application should be mentioned in the article. *Quick Connect* will not print straight promotional articles.

Your article will be reviewed by Developer Programs and the User Group Connection newsletter staff. These people will determine whether it offers an appropriate, appealing message to *Quick Connect*'s readership.

Developer Programs will notify you within two weeks to let you know whether or not your article will be included in the User Group newsletter.

Please send your product information and a copy of your article to the following address:

Developer Programs
Apple Computer, Inc.
20525 Mariani Avenue, M/S 51W
Cupertino, CA 95014
Attn: Apple User Group Newsletter





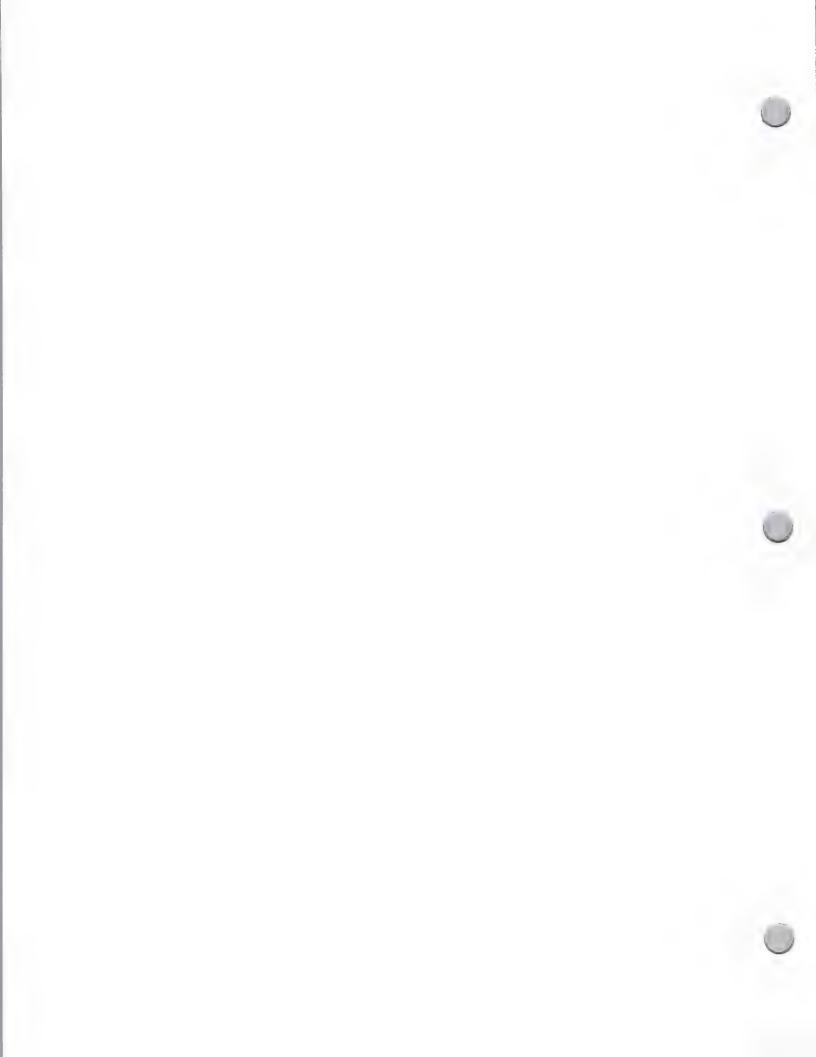
DTP Media List

Advertising and Publications

October 1, 1988

Desktop Publishing Media Advertising List

Publication	Target Audience	Circulation	Contact
Advertising Age 6404 Wilshire Blvd. Los Angeles, CA 90048	Ad Agencies/Marketing Firms	91,462	Randy McDowell (213) 651-3710
Association Management 450 Sansome St., # 1420 San Francisco, CA 94111	Ad Agencies/Marketing Firms	17,132	Peter Scott (415) 421-7950
Business Marketing 740 North Rush Street Chicago, IL 60611	Ad Agencies/Marketing Firms	47,088	Kathleen Gallegher (312) 649-5260
Communication World 870 Market St., #940 San Francisco, CA 94102	Public Relations/ Consulting Firms	14,457	Jim Ryan (415) 433-3400
Editor & Publisher 3700 Wilshire Blvd., # 500 Los Angeles, CA 90010	Small Publishers/Small Newspaper	s 27,614	Bill Marshall (213) 382-6346
EP & P '88 29 N. Wacker Dr. Chicago, IL 60606	Corporate Personnel	45,092	Elizabeth Berglund (312) 726-2802
Folio Six River Bend, P.O. Box 4949 Stamford, CT	Small Publishers/Small Newspaper	rs 11,008	Sara Sikes (203) 358-9900
Graphic Design 120 East 56th Street New York, NY 10022	Graphic Arts	24,797	Milton Kaye (212) 759-8813
HOW 104 Fifth Ave. New York, NY 10011	Graphic Design	42,725	Lewis Schaffer (212) 463-0600
Magazine Design & Production 4551 West 107 Street, # 343 Overland Park, KS 66207	Small Publishers/Small Newspaper	rs 25,780	Evelyn Filski (913) 642-6611





DTP Media List

Advertising and Publications

October 1, 1988

Desktop Publishing Media Advertising List

Publication	Target Audience	Circulation	Contact
Marketing & Media Decisions 1800 Century Park East, # 200 Los Angeles, CA 90067	Ad Agencies/Marketing Firms	31,229	Nelda Chambers (213) 553-3636
Personal Publishing 421 Connecticut San Francisco, CA 94107	Corporate Personnel	50,026	John Lewis (415) 641-1865
Personnel Administrator 606 North Washington Street Alexandria, VA 22314	Corporate Personnel	38,409	Wayne Carter (408) 996-8912
Personnel Journal 245 Fischer Avenue, B-2 Costa Mesa, CA 92626	Personnel and Training	23,819	Les Gage (714) 751-1883
Print 355 Lexington Avenue New York, NY 10017	Graphic Arts	47,705	Virginia Berke (212) 463-0600
Printing Impressions 13101 Washington Blvd. Los Angeles, CA 90066	Small Publishers/Small Newspaper	93,926	Sigrid Schweitzer (213) 306-6170
Public Relations Journal 33 Irving Place New York, NY 10003	Public Relations/Consulting Firms	17,702	Zoe Dictrow (212) 995-2230
Publish! 501 Second Street San Francisco, CA 94107	Corporate Personnel	25,000	Corinne Cox (415) 243-0600
Quick Printing 1680 S.W. Bayshore Blvd. Port St. Lucie, Fl 34984	Small Publishers/Small Newspaper	rs 36,643	Cyndi Schulman (407) 879-6666
Sales & Marketing Management 10540 Talbert Ave., East Tower, # 150 Fountain Valley, CA 92708	Ad Agencies/Marketing Firms	52,602	Scott Evans (714) 962-7639
Step By Step Graphics 6000 North Forest Park Drive Peoria, IL 61614	Graphic Arts	16,881	Bob Behrends (309) 688-2300





DTP Media List

Advertising and Publications

October 1, 1988

Desktop Publishing Media Advertising List

Publication	Target Audience	Circulation	Contact
Technical Communication 428 East Preston, Street Baltimore, MD 21202	Technical Documentation within Corporations	10,143	Donald Pfarr (301) 528-4000
Training 21243 Ventura Blvd., # 234 Woodland Hills, CA 91364	Personnel and Training	47,874	Rhea Atkinson (818) 716-7477
Verbum P.O. Box 15439 San Diego, CA 92115	Graphic Designers	5,000	Michael Gosney (619) 463-9977



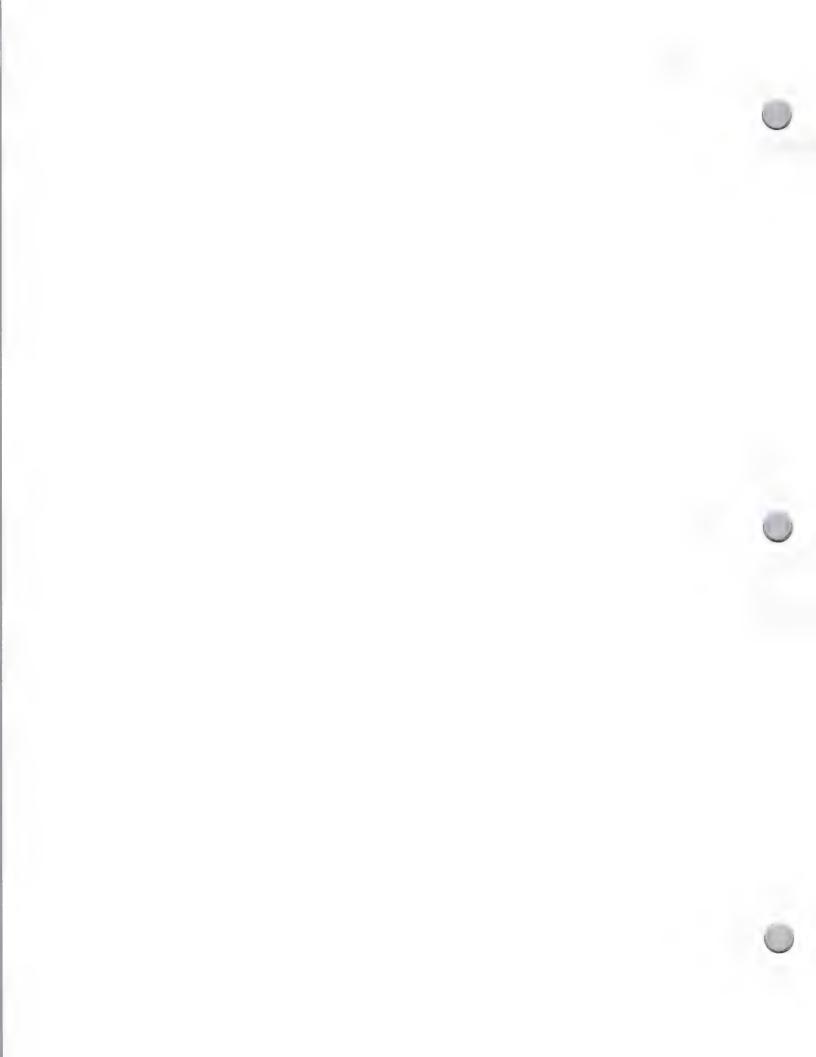


Engineering Media List

Advertising and Publications

October 1, 1988

Publication	Target Audience	Circulation	Contact
Architectural Record 23232 Peralta Drive Laguna Hills, CA 92653	Architectural Engineer	74,331	William Hegue (714) 859-4448
Architecture 5830 Oberlin Drive, # 300 San Diego, CA 92121	Architectural Engineer	66,451	James Anderson (619) 450-6462
Chemical Engineering 425 Battery St. San Francisco, CA 94111	Chemical Engineer	62,290	Dick Carpenter (415) 362-4600
Computer Design 1000 Ewell Ct. Palo Alto, CA 94303	Design Engineer	100,474	John Sly (415) 965-4334
Computer Graphics Today 1714 Stockton St. San Francisco, CA 94133	Graphic Designer	30,830	Susan Warner (415) 956-5350
Computer Graphics World 1000 Ewell Ct. Palo Alto, CA 94303	Graphic Designer	43,529	John Sly (415) 965-4334
Design Graphics World 1424 4th Street, # 231 Santa Monica, CA 90401	Graphic Designer	40,170	Denise Helmrich (213) 451-5655
Design News 3031 Tish Way, Suite 100 San Jose, CA 95128	Design Engineer	170,062	Philip Lenihan (408) 243-8838
Electronic Business 3031 Tisch Way, # 100 San Jose, CA 95128	Electrical Engineer	60,943	Jack Kompton (408) 243-8838
Electronic Design 1625 Alameda, Suite 900 San Jose, CA 95126	Electrical Engineer	137,191	Mary Jean Davidson Ein Hill (408) 282-7000
Electronic Engineering Times 1054 Saratoga/Sunnyvale Road San Jose, CA 95129	Electrical Engineer	121,527	Michael Torcellini (408) 252-6191



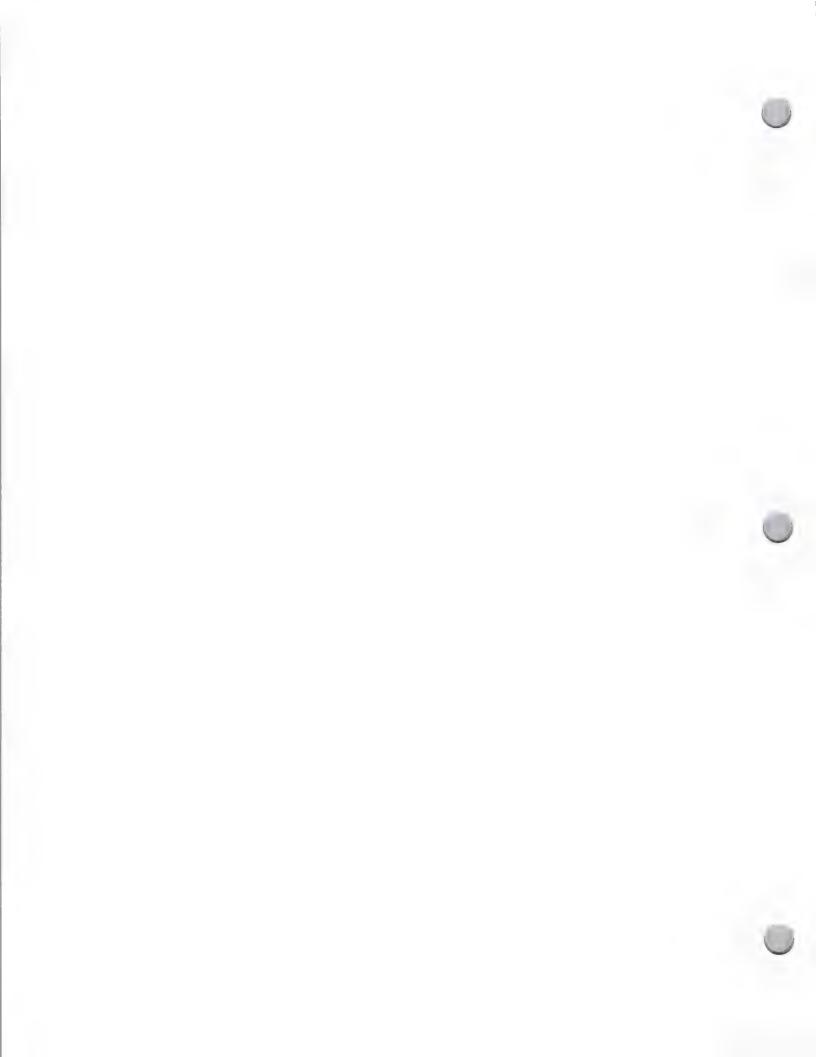


Engineering Media List

Advertising and Publications

October 1, 1988

Publication	Target Audience	Circulation	Contact
Electronic News 2479 East Bayshore, # 820 Palo Alto, CA 94303	Electrical Engineer	92,813	Gerry Ziegler (415) 496-4014
Electronics 1625 Alameda, # 900 San Jose, CA 95126	Electrical Engineer	125,613	Mary Jean Davidson (408) 282-7000
Industrial Engineering 25 Technology Park/Atlanta Norcross, GA 30092	Industrial Engineer	47,362	Margaret Nemec (404) 449-0460
Machine Design 16255 Ventura Blvd., # 300 Encino, CA 91436	Mechanical Engineer	178,708	Andrew Dellins (818) 990-9000
Mechanical Engineering 9500 Telstar Ave., # 215 El Monte, CA 91731	Mechanical Engineer	118,847	Leah Vickers (415) 969-9933
Plan & Print 180 East Main Street Tustin, CA 92680	Mechanical Engineer	28,206	Bill Kitterge (714) 544-2555
Plant Engineering 12233 West Olympic Blvd., # 236 Los Angeles, CA 90064	Mechanical Engineer	128,656	Susan Green (213) 826-5818
S. Klein Computer Graphics Review 881 Dover Dr., # 14 Newport Beach, CA 92663	Graphic Designer	22,000	Terry Buckley (714) 722-1242



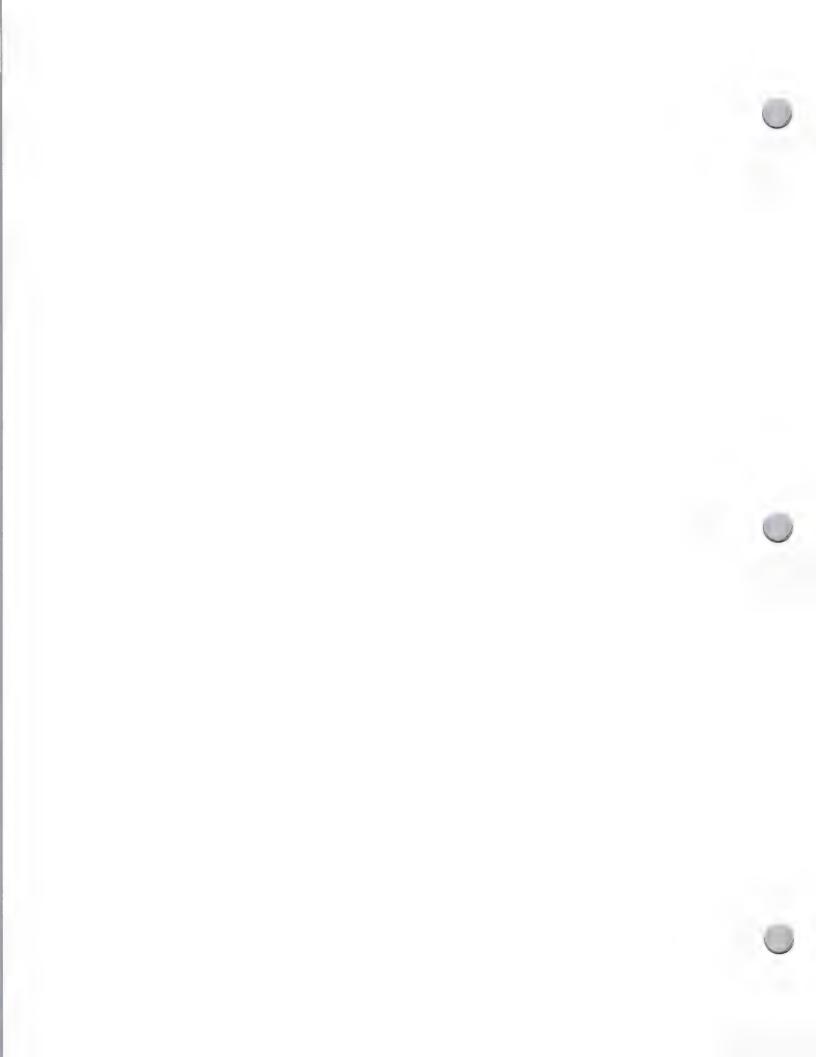


Advertising and Publications			October 1, 1988
Publication	Target Audience	Circulation	Contact
AACJC 1 DuPont Circle #410 Washington D.C. 20036	Teachers and Administrator	25,000	Judy Soloman (301)530-1343
Academic Computing P.O. Box 804 McKinney, TX 75069	Teachers and Administrators	100,000	Joel Kolbensvik
American Society for Engineering Education 11 Dupont Circle, # 200 Washington, DC 20036	Faculty	11,000	Joan Springfield (202) 293-7080
Academic Technology 1311 Executive Center Dr., # 22 Talahassee, FL 32301	Teachers and Administrators 20	40,000	Tony Roberts (904) 878-4178
Change Magazine 400 Albemarle Street, N.W. Washington, DC 20016	Teachers and Administrators	13,892	Wendy Schwartz (202) 362-6445
The Chronicle of Higher Education 1255 23rd Street N.W., # 700 Washington, DC 20037	Teachers and Administrators	79,053	Robinette Ross (202) 466-1000
College English 1111 Kenyon Road Urbana, IL 61801	Teachers and Administrators	16,100	Carrie Stewart (217) 328-3870
College Comp.& Communication Teachers and Administrators 1111 Kenyon Road Urbana, IL 61801		10,000	Carrie Stewart (217) 328-3870
College & University Computer Media West P.O. Box 47667 Phoenix Az. 85068	r Directory Teachers and Administrators	5,000	Cathy Woods (602)494-9444
Collegiate Microcomputer Rose-Hulman Institute of Techn Terre Haute, IN 47803	Teachers and Administrators nology	2,000	Brian Winkle (812) 877-1511





Advertising and Publication	ns		October 1, 1988
Publication	Target Audience	Circulation	Contact
Electronic Learning 730 Broadway New York, NY 10003	Teachers and Administratos	80,000	Bruce Gardner (212) 505-3478
Engineering Education 11 DuPont Circle, Suite 200 Washington, D.C. 20036	Teachers and Administrators	11,998	Joan Springfield (202)293-7080
Macintosh Times C/O CRC 1202 Blockley Hall Philadelphia, Pa	Engineering		Sam Hahn (215)243-8394
MacUser 110 Marsh Dr., # 250 Foster City, CA 94404	Computer Enthusiasts	170,066	Hjordis Fammestad (415) 378-5600
Macworld 501 Second Street, # 500 San Francisco, CA 94107	Computer Enthusiasts	214,365	Patricia Navone (415) 243-0505
PMLA Modern Language Association 10 Astor Place New York, NY 10003-6981	Teachers and Administrators	29,600	Laura Cohen (212) 614-6305
Research in Teaching of English 1111 Kenyon Road Urbana, IL 61801	Teachers and Administrators	4,500	Carrie Stewart (217) 328-3870
Social Science Microcomputer Duke University Press P.O. Box 6697 College Station Durham, NC 27708	Computer Purchasers	1,015	Dan Ross (919) 684-2173
Teaching English in Two-Year College 1111 Kenyon Road Urbana, IL 61801	Teachers and Administrators	3,200	Carrie Stewart (217) 328-3870
T.H.E. Journal P.O. Box 17239 Irvine, Ca 92713	Teachers and Administrators	95,500	Cheri W. Donnelly (714) 261-0366





Legal Media List

Advertising and Publications

Publication	Target Audience	Circulation	Contact
ABA Journal 4962 El Camino Road, #320 Los Altos, CA 94022	Private practice	382,135	Harway and Blake (415) 965-7411
The American Lawyer 600 Third Avenue New York, NY 10016	Large firms	18,251	Christopher Edman (212) 973-2800
Barrister 1800 N. Highland Avenue Hollywood, CA 90028	Career development	159,489	Alex Lilburn (213) 462-2700
Case & Comment 50 Broad Street E. Rochester, NY 14694	Private practice	104,653	Robert Webber (716) 546-5530
Legal Administrator 104 Wilmot Road, #205 Deerfield, IL 60015-5195	Management and administration areas	17,000	Sam Donnelly (312) 940-9240
Legal Assistant Today 6060 N. Central Expressway # Dallas, TX 75206	Legal assistants 534	16,304	Jack Powers (214) 369-6868
Legal Economics 1800 N. Highland Avenue Hollywood, CA 90028	Law office management	24,437	Louise Gravel (202) 457-0686
Legal Times 1730 M Street, #802 Washington D.C., 20036	Federal, legal, and lobbying	5,963	Gloria Borland (202) 457-0686
The NALS Docket 2250 E. 73rd Street, #550 Tulsa, OK 74136	Legal secretaries and assistants	16,604	Tammy Hailey (918) 493-3540
The National Law Journal 111 Eighth Avenue New York, NY 10011	Small to large firms	42,030	Clinton Alphen (212) 741-8300





Legal Media List

Advertising and Publications

October 1, 1988

Publication	Target Audience	Circulation	Contact
The Practical Lawyer 4025 Chesnut Street Philadelphia, PA 19104	Practice of law	13,686	Pamela Barrow (215) 243-1662
Trial 3303 Harbor Blvd., #G-11 Costa Mesa, CA 92626	Trial lawyers	65,835	Barbara Jones (714) 540-3554



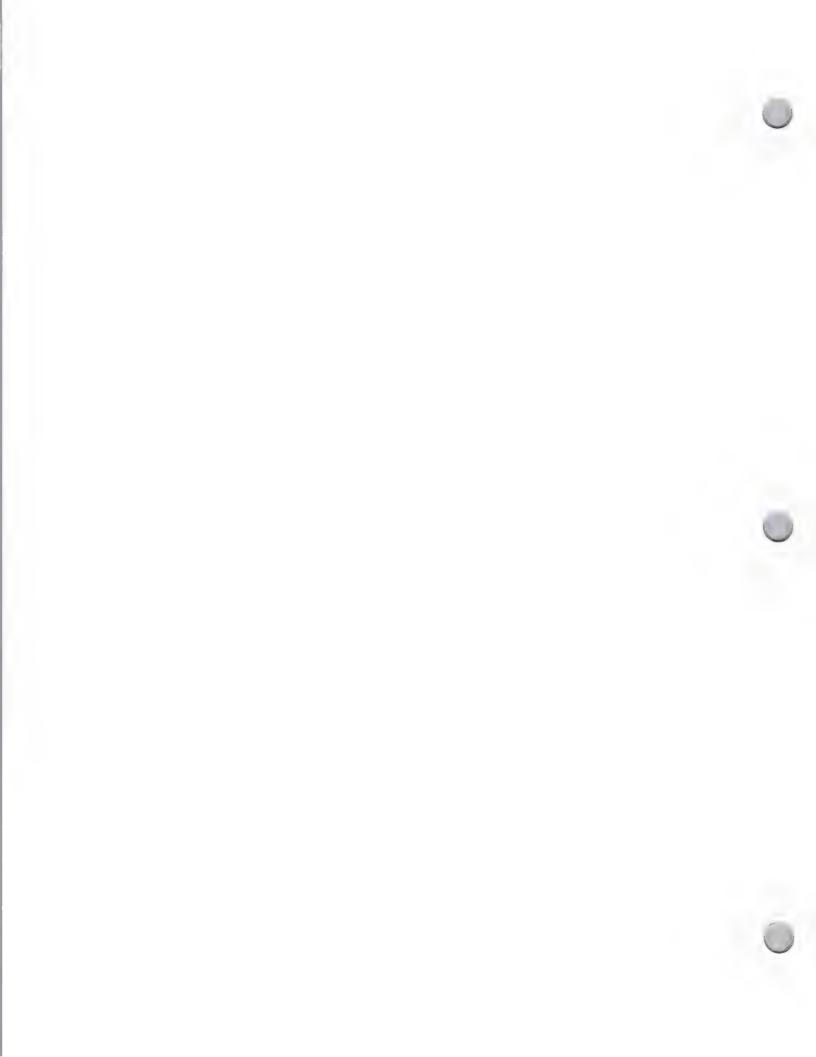


Music Media List

Advertising and Publications

October 1, 1988

Publication	Target Audience	Circulation	Contact
Electronic Musician 19725 Sherman Way Suite 160 Canoga Park, CA 91306	Professional musicians	44,000	Ken Rose (818) 709-4662
Keyboard 20085 Stevens Creek Blvd. Cupertino, CA 95104	Professional musicians/ keyboard enthusiasts	86,000	David Williamson (408) 446-1105
Music, Computers & Software 10 East Main Street Huntington, NY 11743	Professional musicians/ computer enthusiasts	51,000	Bill Stephen (516) 673-3243
Music Technology 7361 Topanga Cyn. Blvd. Canoga Park, CA 91303	Professional musicians	50,000	Brent Heintz (818) 704-8777
Musician 1515 Broadway New York, NY 11743	Professional musicians	102,000	Ross Garnick (212) 764-7399
Rolling Stone 8500 Wilshire Blvd. Suite 926 Beverly Hills, CA 90211	General music enthusiasts	268,000	Bill Harper (213) 659-1242

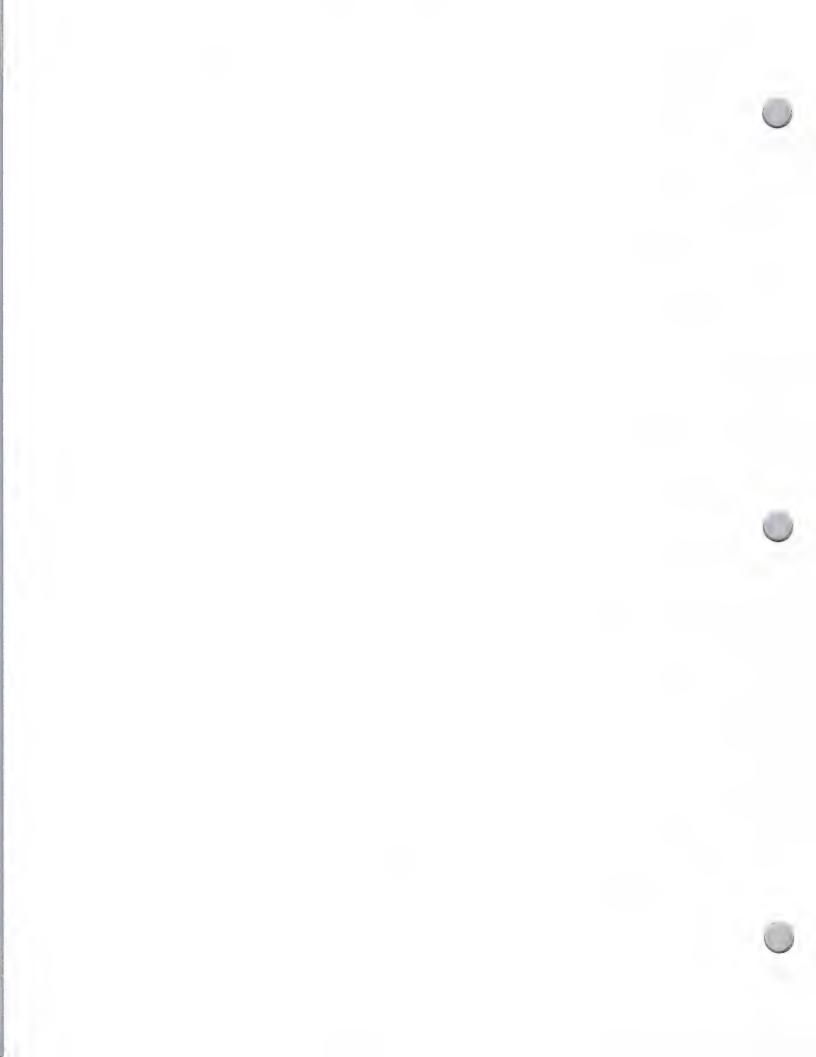




Government Media List

Advertising and Publications

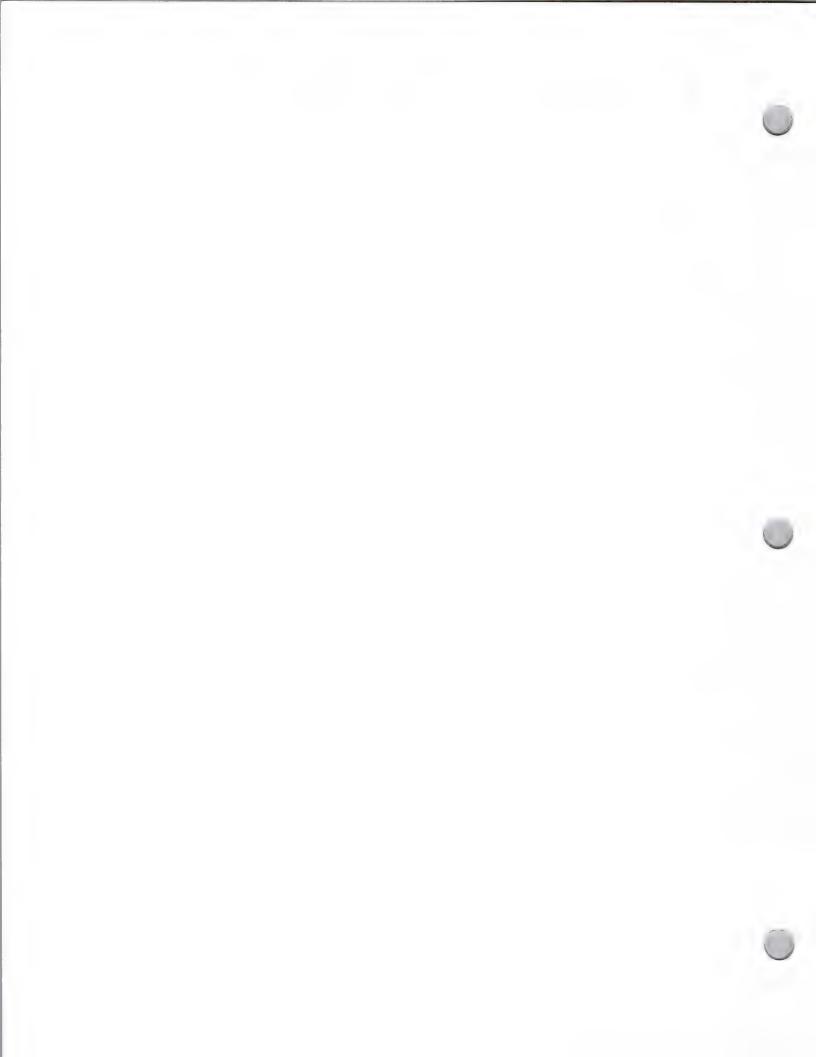
Publication	Target Audience	Circulation	Contact
American City & County 6255 Barfield Road Atlanta, GA 30328	City and county officials, public and private engineers	64,000	Steve Stone (212) 613-9703
County News 440 First Street N.W., Ste. 800 Washington, D.C. 20001	Elected and appointed county officials, state and federal government officials	30,000	Adrienne Petri (202) 393-6226
Federal Computer Week 3110 Fairview Park Dr., #1040 Falls Church, VA 22042-4599	Federal government ADP users, vendors, and consultants	50,000	Dave Topus (703) 876-5108
Governing 1414 22nd St. N.W. Washington, D.C. 20037	Top-level officials in state and local government	64,200	Frank Quigley (202)887-6256
Government Computer News 1620 Elton Road Silver Spring, MD 20903	Federal employees	82,000	Becky McAdams (301) 445-4405
Government Data Systems 50 West 23rd Street New York, NY 10010	Federal, state, and local govern- ment officials involved in personal computer management	27,980	Ken Luft (212) 645-1000
Government Executive 1730 M Street N.W. Washington, D.C. 20036	Federal employees	71,570	Erica Van Dyk (202) 862-0600
Government Product News 1100 Superior Avenue Cleveland, OH 44114	State and municipal employees	85,100	Robert Marinez (216) 696-7000
Gov't. Microcomputer Letter P.O. Box 16645 Tampa, FL 33687	City, county, and town managers, departments, and divisions; private nonprofit organizations	1,500	Madeleine Havlick (813) 622-8484
Government Technology 1831 V Street Sacramento, CA 95818	State and local government DP/ MIS executives and managers, and end users with supervisory responsibilities	55,175	Martin Small (916) 443-7133
MicroSoftware News ICMA 1120 G Street N.W., Ste. 300 Washington, D.C. 20005	Local government managers, department heads, and others involved in computer management	750	Christine Ulrich (202) 626-4600





Government Media List

Advertising and Publication	ns		October 1, 1988
URISA News 319 C Street S.E. Washington, D.C. 20003	Government officials, public and private engineers	1,800	Peter Van Demark (202) 543-7141
Washington Apple PI Journal 8227 Woodmont Avenue, #201 Bethesda, MD 20814	Federal government employees, members of user groups	6,000	Tom Warrick (301) 654-8060



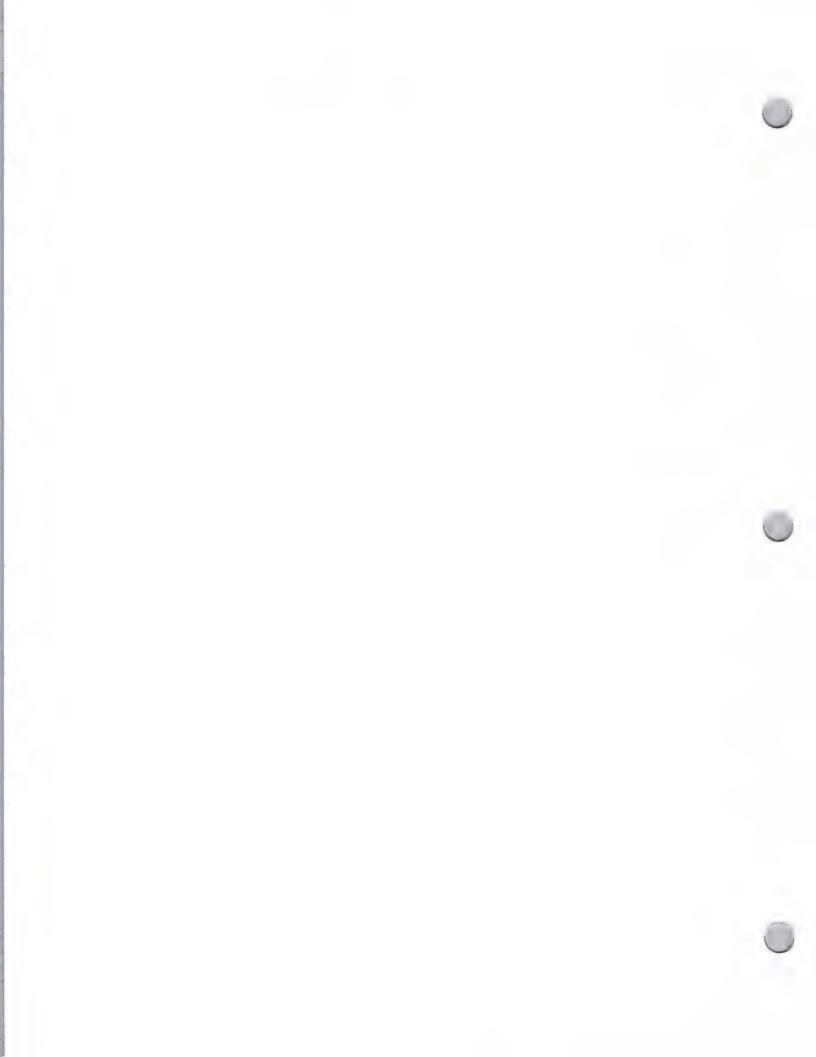


User Group Media List

Advertising and Publications

October 1, 1988

Publication	Target Audience	Contact
The Macintosh Times c/o CRC 1202 Blockley Hall Philadelphia, PA 19104	Higher Education & Engineering Macintosh	Sam Hahn (213) 243-8394
The Michigan Apple P.O. Box 567 Warren, MI 48090-0567	General	Mike Robinson (313) 280-1111
The Untitled Box 233 Centereach, NY 11720-0233	General	Al LaPlaca (516) 231-1919 ex. 292
Topeka Area Apple Group 5419 SW 28th St. Topeka, KS 66614	General	Ronald W. Hurd (913) 272-5033 (913) 357-2786
Washington Apple Pi 8227 Woodmont Ave. # 201 Bethesda, MD 20814	General	Bernard Urban (301) 654-8060





K-12 Media List

Advertising and Publications

Publication	Target Audience	Circulation	Contact
American School Board Journal 1680 Duke Street Alexandria, VA 22314	Administrators	40,954	Tom Midgley (213) 450-9001
American School & University 401 North Broad Street Philadelphia, PA 19108	Administrators	44,074	Ron Levinson (805) 379-3955
A Positive Approach 1600 Malone St. Municipal Airport Millville, NJ 08332	Special Education	25,000	Ann Miller (609) 327-4040
Classroom Computer Learning 2451 East River Road Dayton, OH 45439	Computer-Aided Inst.	71,638	Joanne McDevitt (415) 457-4333
Closing the Gap P.O. Box 68 107 1/2 North 8th Henderson, MN 56044	Special Education	10,000	Maryann Hardy (612) 248-3294
Curriculum Product News Six River Bend P.O. Box 4949 Stamford, CT 06907-0949	Administrators	49,680	Kyle Finney (213) 462-2700
Education Week 4301 Connecticut Avenue NW Suite 250 Washington, DC 20008	Administrators	57,000	Arleigh Hupp (714) 720-0222
Electronic Learning 730 Broadway New York, NY 10003	Computer-Aided Inst'n.	83,000	Susan Flora (213) 827-9183
Instructor 545 Fifth Avenue New York, NY 10017	Teachers	260,000	Jon Harris (312) 938-2300
Learning 1111 Bethlehem Pike Springhouse, PA 19477	Teachers	275,000	Terry Nelson (312) 885-1140





K-12 Media List

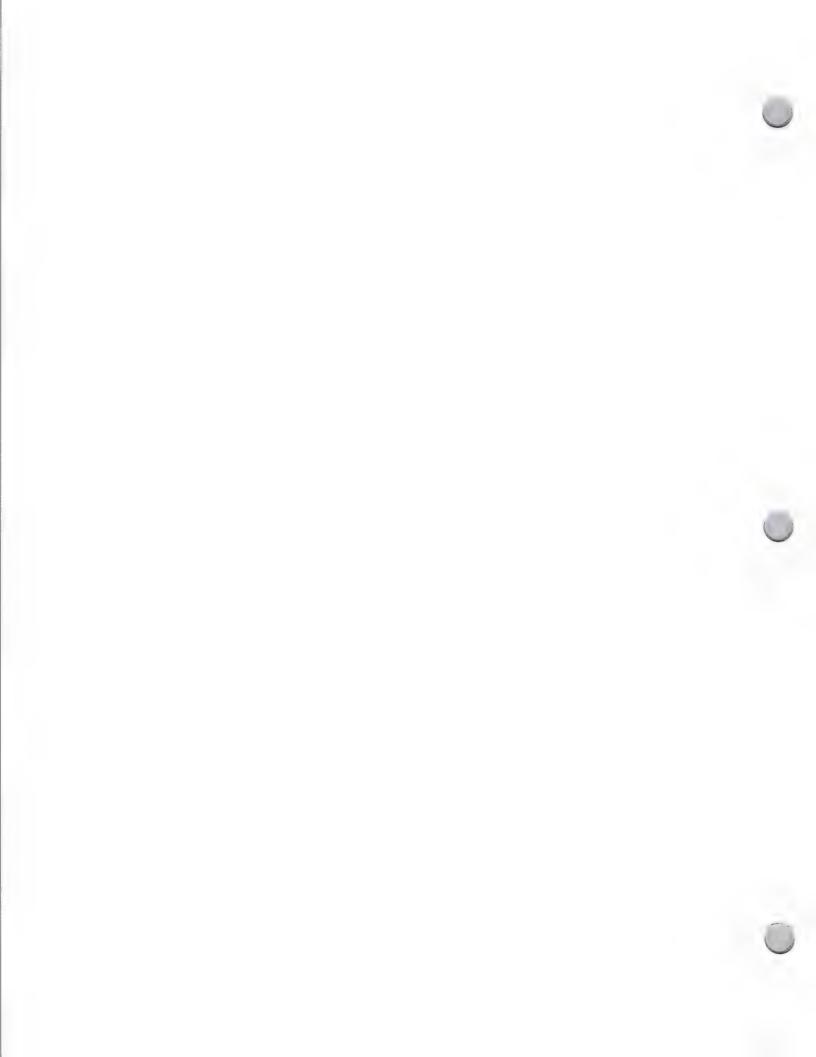
Advertising and Publication	ns		October 1, 1988
Publication	Target Audience	Circulation	Contact
Phi Delta Kappan 8th & Union Box 789 Bloomington, IN 47402	Administrators	153,233	Kristin Herzog (812) 339-1156
School & College 1100 Superior Avenue Cleveland, OH 44114	Administrators	63,051	Ken Smitley (818) 990-9000
Teaching and Computers 730 Broadway New York, NY 10003	Computer-Aided Inst'n.	42,000	Susan Flora (213) 827-9183
Teaching/K-8 325 Post Road West Westport, CT 06880	Teachers	105,000	Carol Garner (214) 951-7344
The Exceptional Parent 605 Commonwealth Avenue Boston, MA 02215	Special Education	35,000	Aniko Klein (213) 469-6497
T.H.E. Journal 2626 S. Pullman Suite 250 Santa Ana, CA 92705	Computer-Aided Inst'n.	88,266	Wendy LeDuke (714) 261-0366





Advertising and Publications

Publication	Target Audience	Circ. #	Contact
A+ Magazine 950 Tower Lane, 18th Fl. Foster City, CA 94404	Apple II end users	177,122	David Ezequelle (415) 378-5699
American Way P.O. Box 8277, Airport Station San Francisco, CA 94128	Air business traveler He and Hc	240,761	Lauren Glasgal (415) 392-5909
Business Software 501 Galveston Drive Redwood City, CA 94063	Execs. in S-M businesses Macintosh	53,111	Roxanne Beverstein (415) 366-3600
Business Week 425 Battery Street San Francisco, CA 94111	Execs. around the world Ile and IIc	857,958	Don Thompson (415) 362-4600
Byte 425 Battery Street, 4th Floor San Francisco, CA 94111	Micros in business Macintosh	418,011	Mike Kisseberth (415) 362-4600
Changing Times 922 Crenshaw Los Angeles, CA 90019	Upwardly mobile, ages 25–50 He and Hc	1,372,867	Pal Flagg (213) 932-1742
COMPUTE!? 2566 Via Tejen Palos Verdes, CA 90274	Personal computers in home and education He and Hc	300,000	Jules Thompson (213) 378-8361
Consumers Digest 1800 N. Highland Avenue Hollywood, CA 90028	Reports on products people would enjoy He and Hc	756,914	Pattis Group (213) 462-2700
Electronic News 2479 East Bayshore Road., #820 Palo Alto, CA 94303	Professionals in electronics and computers He and Hc	92,813	Marilyn Frigard (415) 496-4014
Forbes 50 California Street San Francisco, CA 94111	Management in U.S. companies He and Hc	740,307	Dick Reynolds (415) 391-7000
Fortune Two Embarcadero Center, # 1900 San Francisco, CA 94111	Upper-level business managers He and Hc	725,000	Tom Martz (415) 982-5000



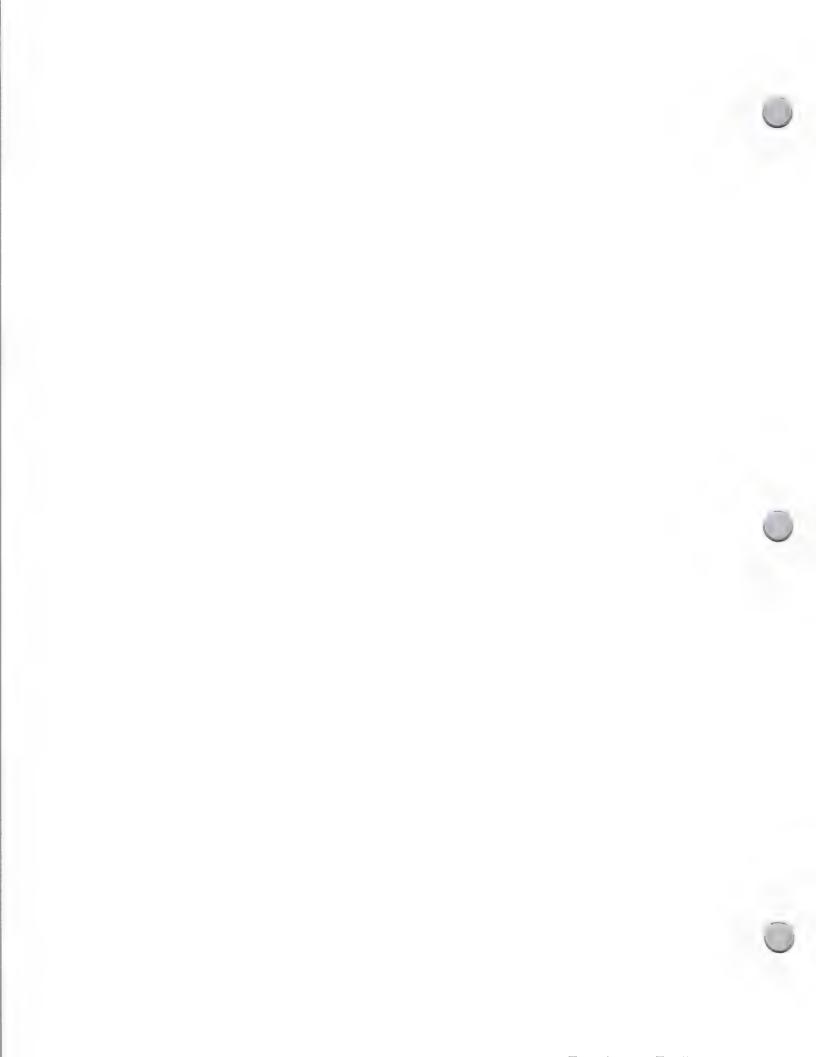


Advertising and Publication	ons		October 1, 1988
Publication	Target Audience	Circ. #	Contact
Home Office Computing 870 Market Street, #555 San Francisco, CA 94111	Beginning micro users He and Hc	437,005	Walter Forsaik (415) 392-4230
Inc. 151 Union Street, #425 San Francisco, CA 94111	Execs of small to mid- size growing companies He and Hc	634,303	Brad Jones (415) 397-4018
InfoWorld 1060 Marsh Road, # C-200 Menlo Park, CA 94025	Macintosh enthusiasts	145,277	Lawrence Morrisette (415) 328-4602
MacBriefs 18421 Beach Blvd. P.O. Box 2178 Huntington Beach, CA 92647	Mac users, Mac dealers professionals	10,000	Taylor Barcroft (714) 842-0518
MACazine 21307 San Miguel Street Woodland Hills, CA 91364	Macintosh users and business users	75,000	Brent Reuman (818) 992-5527
Macintosh Buyer's Guide 185 Berry Street, # 5401 San Francisco, CA 94107	Macintosh end users and dealers	125,000	Chuck Abrams (415) 777-3911
Macintosh Today 501 Second Street San Francisco, CA 94107	Enthusiasts Macintosh	50,000	Noreen St. Pierre (415) 978-3370
MacTutor 117 Primrose Avenue Placentia, CA 92670	Technically minded customer Macintosh	10,000	Bruce Openshaw (714) 993-1701
MacUser 110 Marsh Drive, # 250 Foster City, CA 94404	Macintosh users and business users	170,066	Gary Carter (415) 378-5600
MacWeek 525 Brannan Street San Francisco, CA 94107 94107	Macintosh end users and corporate users	39,625	William Peck (415) 882-7370
Macworld 501 Second Street, # 600 San Francisco, CA 94107	Enthusiasts Macintosh	214,365	Patricia Navone (415) 243-0505





Advertising and Publication	ns		October 1, 198
Publication	Target Audience	Circ. #	Contact
McGraw-Hill/ Management Network 13906 Ventura Blvd., # 309 Los Angeles, CA 91423	General Business Ile and IIc	1,504,432	Jacques Montague (818) 501-0348
Mini Micro Systems 3031 Tisch Way, # 100 San Jose, CA 95128	Value-added OEMs He and Hc	138,654	Richard Bastas (408) 243-8838
Money Two Embarcadero Ctr., # 1900 San Francisco, CA 94111	America's magazine of personal finance Macintosh	1,821,657	Alison Embree-Carbore (415) 982-5000
National Geographic 100 Spear Street, # 1615 San Francisco, CA 94105	General He and Hc	10,498,594	James Shepherd (415) 541-0442
New York Times Magazine 900 Wilshire Blvd. Los Angeles, CA 90017	General interest He and Hc	1,589,290	Richard Marks (213) 628-3143
Newsweek 505 Sansome Street, # 1501 San Francisco, CA 94111	News, commentary, public affairs, current events He and Hc	3,198,007	Michael Callan (415) 788-4321
Newsweek-Executive Plus Edition 505 Sansome Street, # 1501 San Francisco, CA 94111	Qualified American management Macintosh	987,716	Michael Callan (415) 788-4321
Nibble 52 Domino Drive Concord, MA 01742	Apple II enthusiasts	72,000	Kevin Rushalko (617) 371-1660
NibbleMac 52 Domino Drive Concord, MA 01742	Macintosh enthusiasts	25,000	Kevin Rushalko (617) 371-1660
Omni 6728 Eton Avenue Canoga Park, CA 91303	Futuristic enthusiast IIe and IIc	934,716	Maré Payne (213) 872-1780



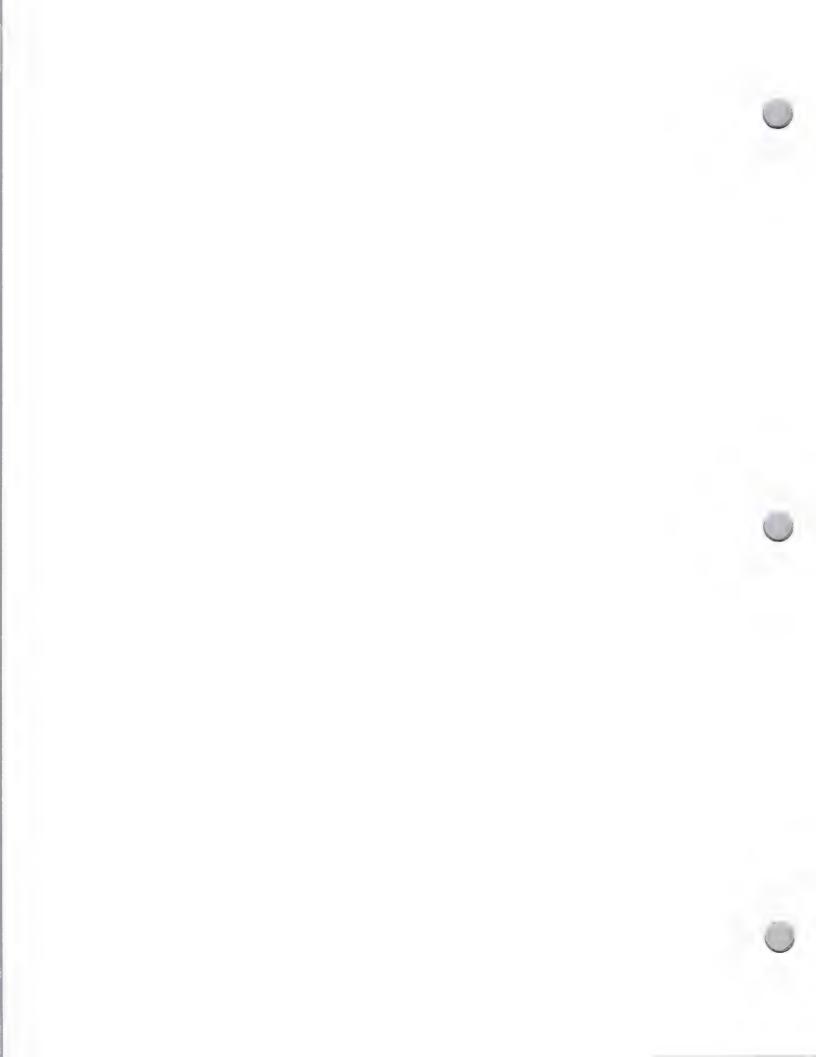


Los Angeles, CA 90025

General Media List

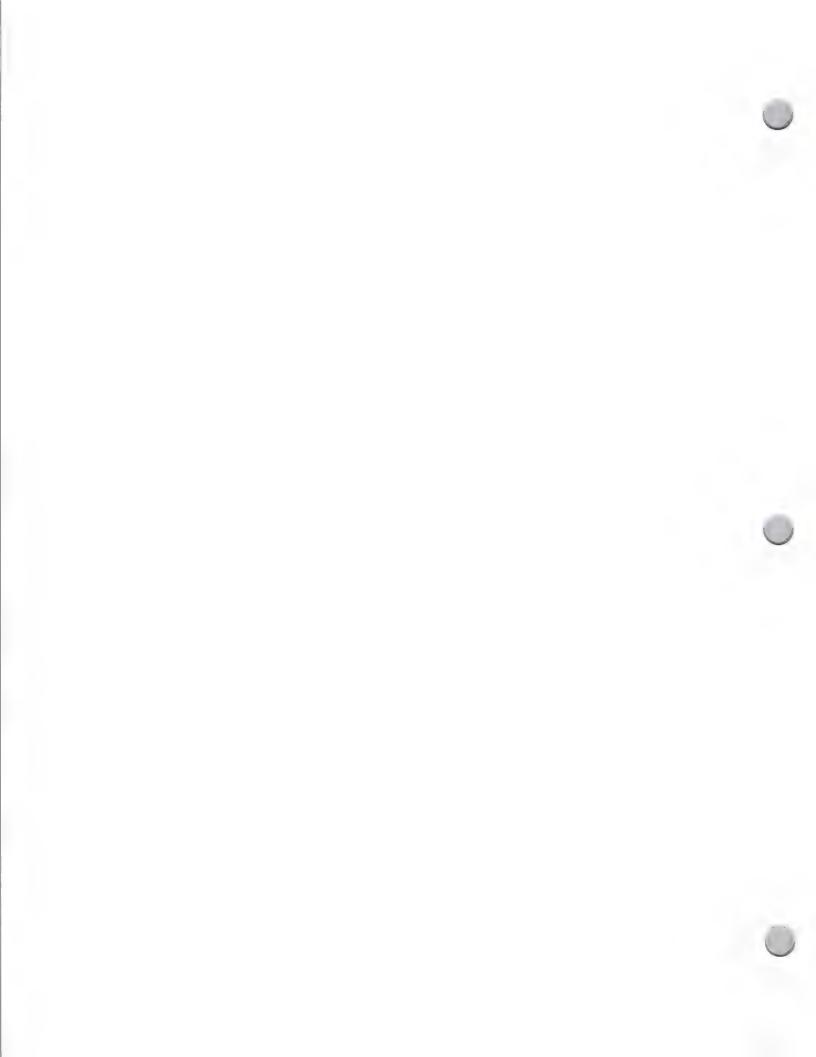
Advertising and Publications			October 1, 1988	
Publication	Target Audience	Circ. #	Contact	
PC Vendors Electronic Buyer's Guide 17155 Newhope, # B Fountain Valley, CA 92708	Retailers	2,000	Bryan Menell (714) 540-6744	
Parenting 501 Second Street San Francisco, CA 94107	Parents He and Hc	217,485	Eileen Sherman (415) 546-7575	
Parents 151 Union Street, # 208 San Francisco, CA 94111	Parents He and Hc	1,675,000	Sandy Fish (415) 981-2572	
People Two Embarcadero Center, # 1900 San Francisco, CA 94111	General interest He and He	3,311,793	James Yeakel (415) 982-5000	
Personal Computing Mag. 1625 The Alameda, # 900 San Jose, CA 95126	Enthusiast He and Hc	493,505	Barbara Gough (408) 282-7000	
Popular Science 3550 Wilshire Blvd., #890 Los Angeles, CA 90010	New products/ Science/Tech. enthusiast He and Hc	1,861,155	Jacque Kelly (213) 380-1936	
School Administrator 15 East 26th Street, Rm# 1814 New York, NY 10010	Elementary school principals He and Hc	16,281	Robert Solomon (212) 683-7905	
Scientific American 922 Crenshaw Blvd. Los Angeles, CA 90019	Science/Tech enthusiasts He and Hc	622,806	Frank LoVerme (213) 932-1742	
Smithsonian 847 Sansome Street, 2nd Floor San Francisco, CA 94111	Individuals interested in culture, art He and Hc	2,243,311	Tom Jones (415) 434-2675	
Sylvia Porter's Personal Finance Magazine 1533 Wilshire Blvd., # 202 Los Angeles, CA 90017	Young successful individuals interested in money management He and Hc	400,187	Joanne Brumfiled (213) 413-6734	
The Atlantic 11601 Wilshire Blvd., # 1840	Contemporary individuals interested in public affairs	473,916	TBD (213) 479-4729	

He and Hc



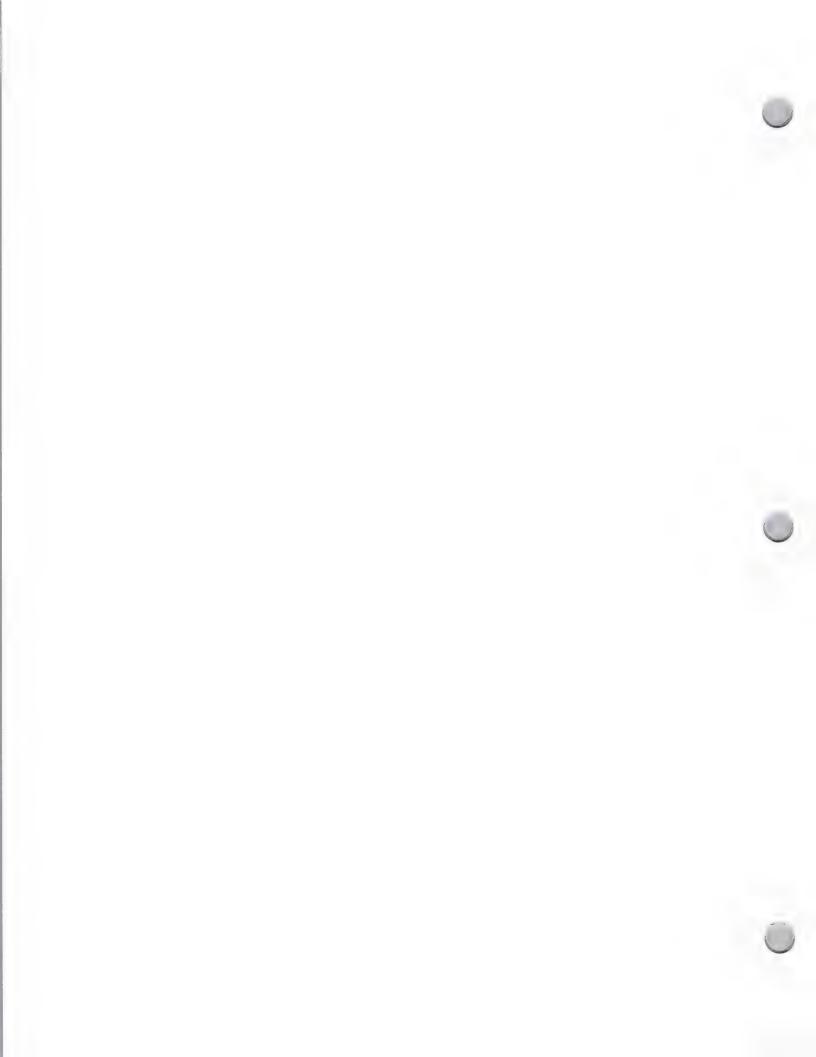


Advertising and Publications			October 1, 1988	
Publication	Target Audience	Circ. #	Contact	
The CAD/CAM Journal for the Macintosh Professional 3315 Sheoter Creek Lane San Bruno, CA 94066	Architects, Engineers, and Designers Macintosh	26,000	Bruce Fein Fein & Associates (415) 589-2420	
The Michigan Apple P.O. Box 567 Warren, MI 48090-0567	General Apple II	275	Mike Robinson (313) 280-1111	
The New Yorker 41 Osgood Place San Francisco, CA 94133	Upwardly mobile with cultural and social interests Macintosh	593,848	Ellen Carucci (415) 434-3232	
The Untitled Box 233 Centereach, NY 11720-0233	General Apple II	TBD	(516) 231-1919 ex. 292	
Topeka Area Apple Group 5419 SW 28th St. Topeka, KS 66614	General Apple II	TBD	Ronald W. Hurd (913) 272-5033 (913) 357-2786	
Washington Apple Pi 8227 Woodmont Ave. # 201 Bethesda, MD 20814	General Macintosh and Apple II	6,000	Bernard Urban (301) 654-8060	
Time Two Emarcadero Center, # 1900 San Francisco, CA 94111	News coverage (world & business), public affairs IIe and IIc	4,683,348	Frederick Gruber (415) 982-5000	
Time-Business Edition Two Emarcadero Center, # 1900 San Francisco, CA 94111	American management All-business circulation Macintosh	1,656,306	Frederick Gruber (415) 982-5000	
U.S. News & World Report 1 Maritime Plaza Golden Gateway Center San Francisco, CA 94111	General interest, current events, public affairs Ile and Ilc	2,366,065	Dudley Wing (415) 392-8593	
U.S. News & World Report- Blue Chip Edition 1 Maritime Plaza Golden Gateway Center San Francisco, CA 94111	General interest, current events, public affairs Ile and Ilc	665,300	Dudley Wing (415) 392-8593	





Advertising and Publications			October 1, 1988	
Publication	Target Audience	Circ. #	Contact	
VISA VIS 369 Pine Street, # 420 San Francisco, CA 94104	Business travelers Macintosh	450,000	Maureen Conn (415) 391-5484	
Venture 870 Market Street, # 480 San Francisco, CA 94102	Entrepreneurs and investors He and Hc	428,739	Lynn Vear (415) 986-2060	
Wall Street Journal 201 California Street San Francisco, CA 94111	Business enthusiasts Macintosh	2,025,176	Glenn Gilbert (415) 986-6886	
Working Mother 100 California Street, # 1176 San Francisco, CA 94111	Career-oriented working mothers Ile and Ilc	606,851	Dale Sones (415) 986-2455	
Working Woman 5900 Wilshire Blvd., # 2460 Los Angeles, CA 90036	Career-oriented success- oriented working women Ile and Ilc	855,434	Diane Crystal (213) 938-8042	



Advertising and Publications

November 1, 1987

General Information (Who Are We?)

The Apple Library Users Group (ALUG) is a group of more than 9,000 school, public, academic, and corporate librarians and individuals who are interested in using Apple computers to manage information. ALUG is a forum for librarians, media specialists, and information professionals to share information with one another about their use of Apple® II and Macintosh® computers. This group, which began in 1981 with 25 members, now has members from a wide selection of locales and working environments, including the People's Republic of China, San Quentin Prison, and the Library of Congress. The common bond is that all the members work in libraries and use Apple computers. If you have a product that caters to the specific needs of the librarian, such as a specialized database or library-management program, the ALUG would like to hear from you.

How to Work with the Apple Library Users Group

The Apple Library Users Group publishes a newsletter, which is distributed free of charge to all members on a quarterly basis, and is the group's main method of communication. The Apple Library Users Group newsletter contains general information about products of interest to librarians, hardware and software reviews, articles about how librarians are using Apple computers, and advertisements. We are proud to note that this newsletter received "The Best Newsletter from a Corporation" award from InfoWorld's John Dvorak. There are several ways that you may be able to contribute product information to this newsletter.

- Press Releases—If you have a hardware or software product that you think might be useful to a librarian, put the Apple Library Users Group on your press release mailing list, and we may be able to include information about your product in our News column. Recent News items included information on a CD-ROM product for the Macintosh, LaserWriter® refills, a 172- megabyte hard disk, and a cabling scheme for AppleTalk® networks.
- **Product Reviews**—We also have many members who are willing to write reviews of your products. Just send the Apple Library Users Group a copy of your product, and we may include a review in our newsletter. For example, our last newsletter included reviews of Adobe IllustratorTM by Adobe Systems and Banner BuilderTM by Channelmark Corporation.
- Advertising—Finally, if your product is a specific library product, we will be happy to include a half page ad, free.

How to Contact the Apple Library Users Group

For sample copies of the ALUG newsletter or additional information, please contact:

Apple Library Users Group, Monica Ertel Apple Computer, Inc. 20525 Mariani Avenue, M/S 8C Cupertino, CA 95014 (408) 973-2552

AppleLink®: Ertel1

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Publication Tips

Advertising and Publications

May 1, 1987

Establishing a good working relationship with editors or writers who can review or mention your new products in their trade publications is an effective way to get inexpensive exposure for your product and company. For instance, your product may be mentioned at no cost in the following:

· New products and product reviews sections

· New items: trends, contests, unusual or humorous news

Letters to the editor

We talked to several prominent editors of well known publications to better understand how to approach the editorial community, and they shared with us the following tips:

How to Make Sure a Publication Knows About Your New Product

There are several ways that you can establish contact with editors or reviewers. These include the following:

• Mail your product to them; include a press release, brochure, company profile. Follow up with a courteous phone call. This helps raise visibility above all other submissions.

Schedule a personal visit to their office to demonstrate your product.

• Meet with them at trade shows — schedule meeting one or two weeks before the show.

What an Editor Looks For in New Products

Before an editor decides to include a product in new product sections or articles, he or she considers the following:

· Does the product fill their readers' needs?

• Is it new, innovative, unique, ground breaking?

Does it coincide with the theme for that particular issue?

· Does it offer price/performance breakthrough?

Does it do what the manufacturer claims?

· Is it available on the market?

What a Reviewer Looks For in New Products

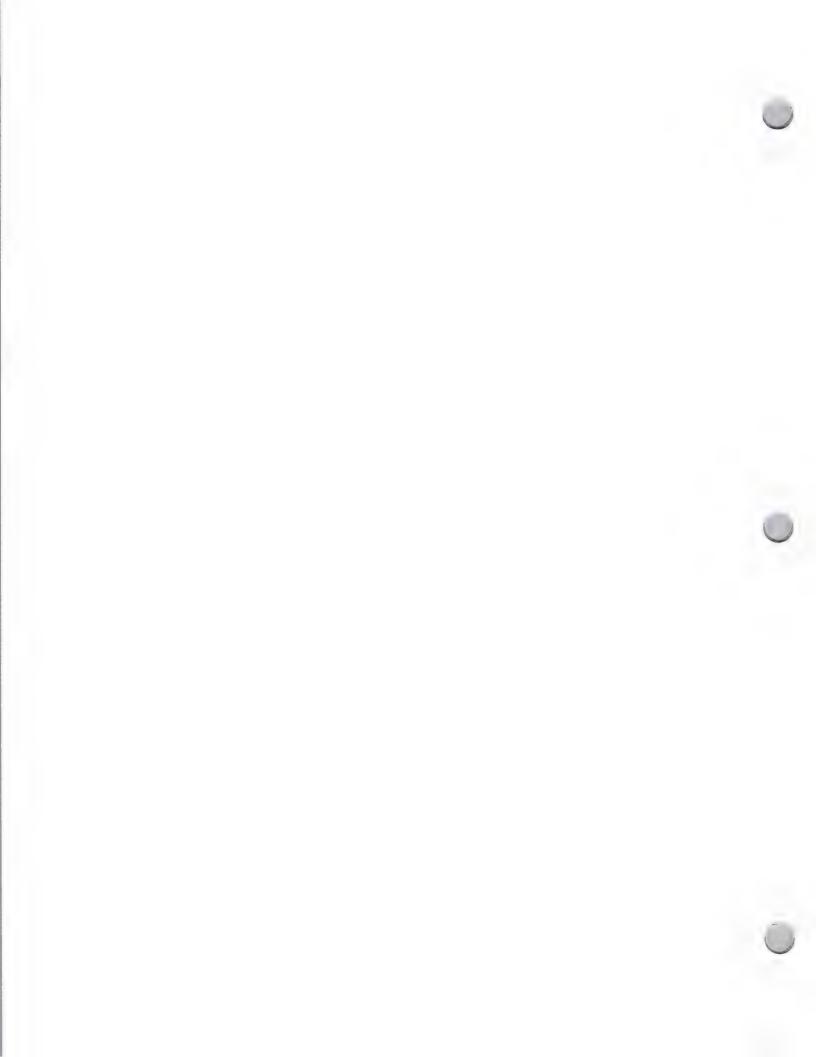
One of the best ways to let your potential customers know about your product is to have it reviewed by a publication. The reviewer looks for certain qualities in a product, such as:

• Does the documentation clearly guide the user?

Does the product meet performance claims?Does the price/performance offer a good value?

• How compatible is the product with other products?

• Is the release version free of bugs, and is it complete as represented?





Publication Tips

Advertising and Publications

May 1, 1988

Average Turnaround Time for Reviews

You should expect to wait about three or four months to see your review published in a monthly magazine. This means that if you are introducing a new product in December and want a review published in January or February, you need to talk to reviewers in August or September. In other words, start early. This gives reviewers enough time to:

- Make article assignments
- · Review the product
- Create illustrations/artwork and arrange page layouts
- Print and ship the magazine





Public Relations February 1, 1988

The Government Publications Directory

The Government Publications Directory was created by the Government Market Research group at Apple Computer to help you publicize your products among government users.

The directory is a listing of key technical and computer publications that are read by federal, state, and local government officials. The purpose of this note is to provide you with the list of these publications, along with a brief description of each. Note, however, that we have more comprehensive information about each of these publications. If you plan to send products to any of these publications for review, or to submit testimonials or articles to them, we strongly urge you to contact Peggy Jensen in Developer Programs first, for the complete directory. It includes valuable information on how to work effectively and efficiently with these publications, and includes the names of the product reviewers and editors.

How to Obtain the Information

If you plan to contact any of the publications that are listed below, please call or write Peggy Jensen in Developer Programs to request the complete directory:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51W Cupertino, CA 95014 Government Publications Directory Attn.: Peggy Jensen

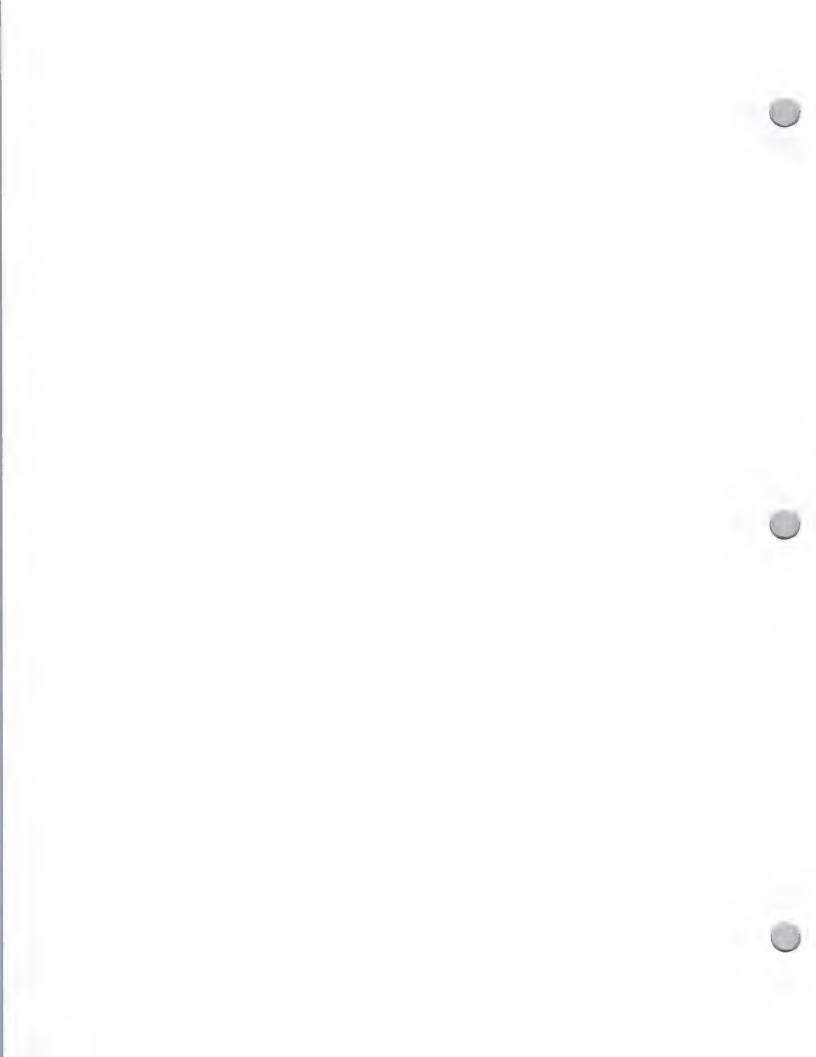
(408) 973-4897

AppleLink®: JENSEN.P

American City & County Communication Channels, Inc. 6255 Barfield Road Atlanta, GA 30328 (404) 256-9800

American City & County magazine has general news, special features, and staff-written and bylined articles about issues in city and county administration. AC&C has a monthly column about computers and applications in government, and several issues each year have special features that focus on computer applications.

Microcomputers in Public Works American Public Works Association 1313 E. 60th Street Chicago, IL 60637 (312) 667-2200





Public Relations

February 1, 1988

The American Public Works Association is a national organization for municipal engineers. It publishes the annual *Microcomputers in Public Works* software directory, and has seven Institutes for Professional Development—institutes of Administrative Management, Buildings and Grounds, Equipment Services, Municipal Engineering, Solid Wastes, Transportation, and Water Resources—each of which publishes a *Pro-Views* newsletter devoted to its specific managerial and technical concerns. The national organization and its 62 regional chapters in the U.S. and Canada host seminars and meetings that sometimes feature vendor presentations of computer applications for public works. The monthly magazine, *APWA Reporter*, deals with technical and management issues in public works.

County News 440 First Street N.W. Washington, D.C. 20001 (202) 393-6226

County News is the official publication of the National Association of Counties, a 2,000-member organization. It has news articles and special features about the legislative, social, and financial issues facing counties.

PC Pulse CP&D, Graduate School, U.S.D.A. 600 Maryland Avenue S.W., Room 106 Washington, D.C. 20024 (202) 447-7124

The PC Pulse newsletter is published by the CP&D (Career Planning and Development) Department of the U.S. Department of Agriculture. It offers personal computer training for Federal government employees in the Washington, D.C. area. CP&D will start offering training for Macintosh® packages in April 1988. PC Pulse is primarily a course catalog and schedule, but also has short articles about user issues and new packages.

Federal Computer Week 3110 Fairview Park Drive, #1040 Falls Church, VA 22042-4599 (703) 876-5100

Federal Computer Week deals exclusively with Federal government computer news and issues. It has feature stories about computer technology and case studies of civilian and defense applications. Regular columns discuss user and technology issues, defense computing, vendor marketing, and acquisitions and procurements.





Public Relations

February 1, 1988

Government Microcomputer Letter Florida Innovation Group P.O. Box 16645 Tampa, FL 33687 (813) 971-1025

The Government Microcomputer Letter (GML) is published by the Southeast Innovation Group, a consortium of the Florida, Virginia, California-Colorado-Arizona-Nevada, Carolinas, and Michigan Innovation Groups. The groups facilitate technology, process, and idea sharing between local governments, and bring the private and public sectors together to reduce costs and improve service. The GML deals with the use of computer hardware and software in local government.

Government Computer News 1620 Elton Road Silver Spring, MD 20903 (301) 445-4405

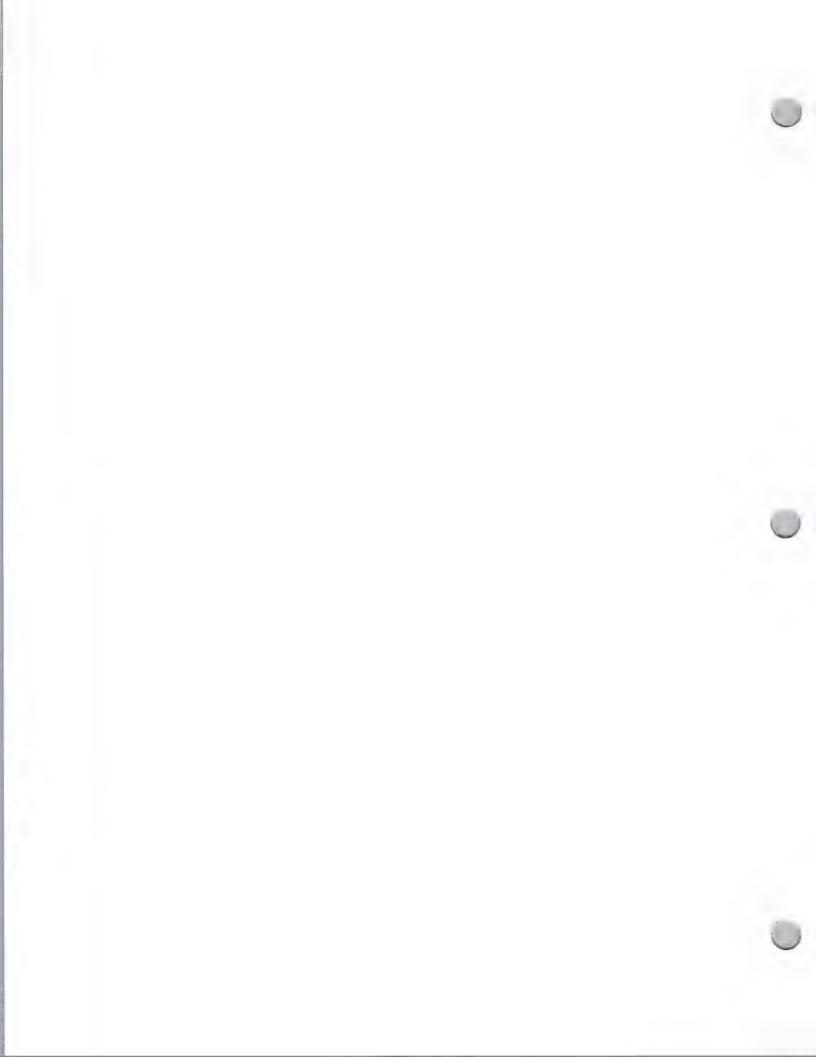
Government Computer News has news about computer products and government computer acquisition and use. Staff-written and bylined articles, as well as regular columns, discuss procurement, technology, and user issues. The main focus of Government Computer News is on the Federal government, but it also has news and articles about state and local government computer issues and applications.

Government Data Systems 50 West 23rd Street New York, NY 10010 (202) 645-1000

The Government Data Systems magazine focuses on computer technology and applications in Federal and state government agencies. It has articles and new-product announcements.

MicroSoftware News ICMA 1120 G Street N.W. Washington, D.C. 20005 (202) 626-4600

MicroSoftware News is published by the International City Managers Association. It has articles about local government computer topics, case histories, and listings of new packages for local governments. The ICMA also publishes an annual directory.



Public Relations

February 1, 1988

Washington Apple Pi Journal 8227 Woodmont Avenue, Suite 201 Bethesda, MD 20814 (301) 654-8060

The Washington Apple Pi Journal is the official club magazine of the Washington Apple Pi User Group, many members of which are Federal government employees. In addition to the Journal's package reviews, the club has an extensive bulletin board system (TCS) that includes user-driven informal reviews and discussions. The Federal SIG (Special Interest Group) accepts vendor demonstrations at its monthly meetings.

Government Technology 1831 V Street Sacramento, CA 95814 (916) 443-7133

Articles in *Government Technology* deal with government computer technology, applications, and case histories. The articles stress technology transfer and productivity enhancements. The "GovernMac" section is devoted exclusively to Macintosh in government, and has case histories, software reviews, and articles.

URISA News 319 C Street S.E. Washington, D.C. 20003 (202) 543-7141

URISA News is published by the Urban & Regional Information Systems Association, an association for government and private-sector professionals involved in land and geographic information. It has articles, club news, and special-interest group (SIG) reports.

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Micro Support Group

Public Relations

February 1, 1988

Who They Are

The Micro Computing Support Group (MCSG) is a group in Apple's Information Systems and Technology (I S & T) organization which provides end user microcomputing support to the 7,000 Apple employees using the Apple ® MacintoshTM computer in their work. MCSG is active in three areas; product evaluation, training, and consulting. Its charter is to make Apple Computer the model of how personal computing should be done in Fortune 500 companies.

How They Can Help You

The MCSG staff can promote your product in a variety of ways to Apple employees and/or Fortune 500 employees. Expert user — support analysts will explore the ways in which your product would best be used at Apple, and communicate their findings to other companies. If they find that your product fills a need, they will do a complete evaluation for it and post it on our AppleLink® network. Information on your product may also be included in their monthly newsletter, MicroWaves, which features new products for the Macintosh. Your product might even become part of the MCSG demonstration center, where employees can try out products firsthand. To protect copyrights, MCSG strictly enforces the policy of forbidding employees to copy software from the demonstration center. MCSG also serves as an excellent beta test site for your products.

What They Do

- Product Evaluation: MCSG provides comparative product evaluations
 of the top software and hardware products in the following product
 categories: word processing, spreadsheets, databases, graphics, charting,
 communication, desk accessories, and utility products. These product
 evaluations are available to Apple employees through the AppleLink
 worldwide network.
- Training: MCSG also provides training on Macintosh products that employees are using at Apple. If training materials are not available from the developer, they create their own to meet Apple employee's needs. These training materials are shared with the Dealer's Sales Support training organization, as well as with other domestic and international Apple sites.
- Consulting: As consultants, MCSG staff provides hot line support for Apple employees using Macintosh products, and provides a demonstration center where employees can preview products before they make a purchasing decision. Their monthly newsletter, *MicroWaves*, informs Apple employees of the latest and greatest Macintosh products. Their consulting activities are not limited to Apple employees, however; they also make presentations to other Fortune 500 companies and government agencies that use Macintosh products, recommending specific products that would best fit their needs.





Micro Support Group

Public Relations

February 1, 1988

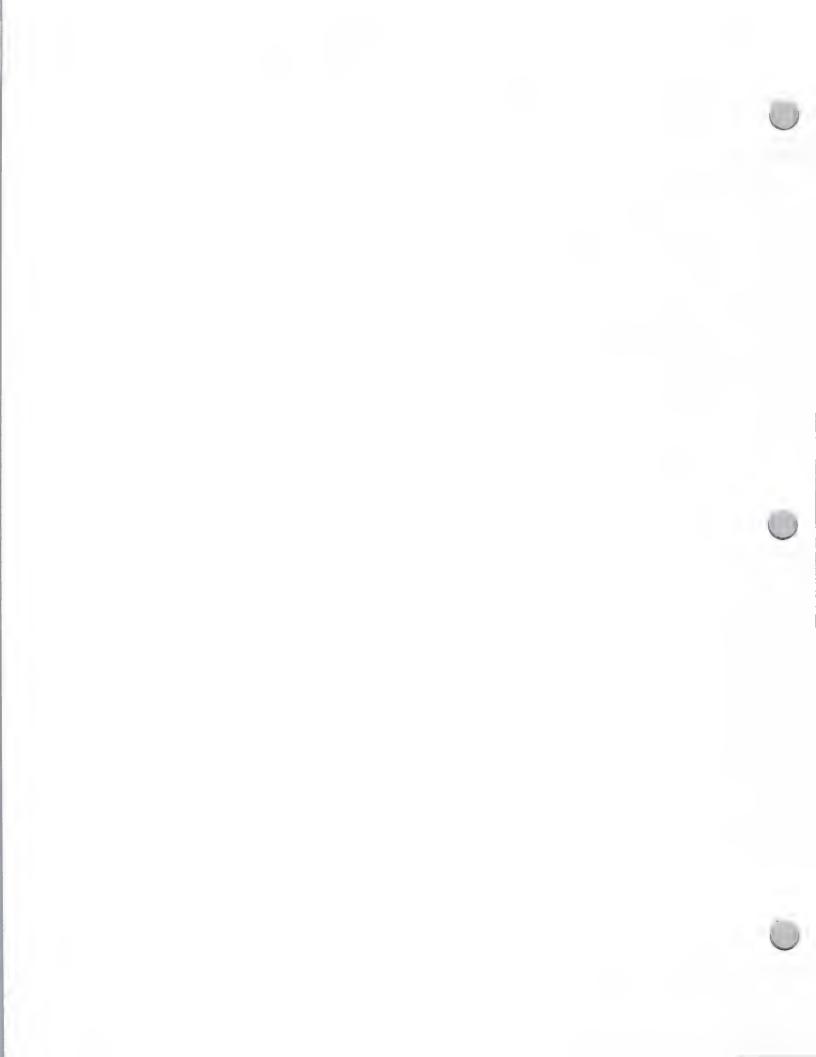
How You Can Work with Them

If you have Macintosh software that is useful for Apple employees and fits into the software categories that were mentioned here, please send MCSG a copy of your product. If your product requires training, the group would appreciate receiving training materials and technical notes (which are especially helpful for those supporting your product on the hot lines).

Send your materials to this address:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 4-Y Cupertino, CA 95014 Attn.: Tom Hammer AppleLink: HAMMER1

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Company Profile Tips

Public Relations May 1, 1987

If you plan to send product information to an editor for a product review or story, you might consider including a company profile with your product and product information. A company profile gives important background information on your company, which helps the editor to place your company and product(s) in the proper perspective.

The following guidelines will assist you in writing your company profile. Keep in mind that this document should be factual, journalistic in style and attitude, and brief (one to two pages).

Company Profile Contents

The first paragraph in the company profile should contain:

- A description of the company's business and which market needs it fills
- A short history of the company—who started it, why, and when
- Key factors that differentiate the company from its competitors (such as unusual capital financing, a unique company philosophy, or company founders with interesting backgrounds)

The second paragraph should explain:

- · Who funded the company and in what amounts
- When and if the company went public

The third paragraph should explain:

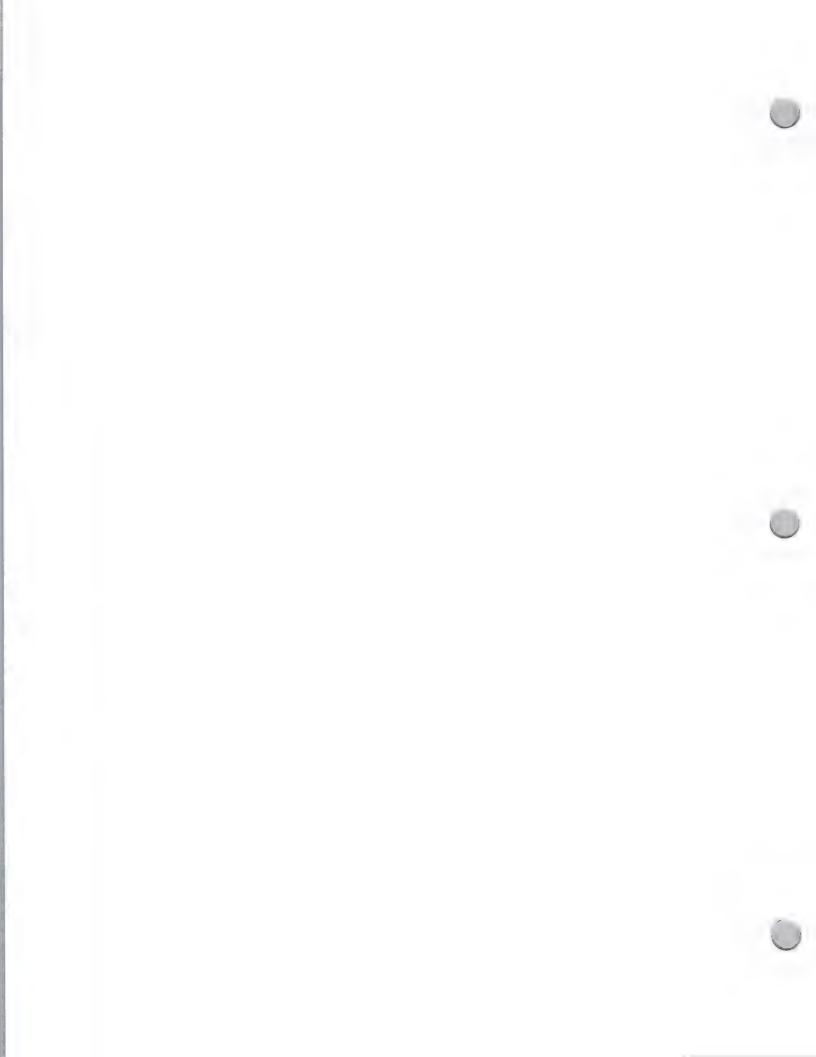
- The product or product line
- The features and benefits of each product
- The services that are provided
- Distribution sales strategies and tactics

The last paragraph should:

- Provide biographical information about the company's top three to five senior management employees. Include:
 - —Each person's title
 - —Present job responsibilities
 - -Previous employment history
 - —Educational background

A final note: This company profile should be included in all of your press kits.

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Press Release Tips

Public Relations

May 1, 1987

Many news stories are drawn from well written press releases that provide the editor with the who, what, why, where, when, and how of a newsworthy event such as a product introduction. If an editor decides to follow up your release, you have the opportunity to reach a large audience with your key messages. Even if an editor does not actually use your release, he or she has learned about your product and company and can use that information in the future.

The purpose of writing a press release is to give an editor the necessary information—and encouragement—to write an announcement or feature story on your product. Note that you are writing primarily for an editor and only secondarily for the actual readers.

How to Write an Effective Press Release

Listed below are guidelines that will help you write a press release.

The Heading

To draw attention to your press release, you should do the following:

- Include a contact name with phone number and address. (This should be placed in an upper corner of the page.)
- Indicate when you want the information to be released (for example, "For Immediate Release").
- Use an appropriate headline that simply states the news. Do not put information in the headline that is not included in the body of the release.

The Lead

The press release should be written so that the most important facts are stated first. The first paragraph, called the "lead," should contain these items:

- Begin with a "dateline." This names the city and state where the news originates followed by the date of the release.
- · Capture the essence of your story and entice the editor to continue reading
- Include only primary information

The Body

The body of your news release supports the information stated in the lead. You should include:

- A quotation by your company president and/or an industry expert
- Information on the product's features and benefits
- Price, shipping dates, and availability information
- A "boilerplate"—a standard one-or-two sentence description of the company should be at the end of every release





Press Release Tips

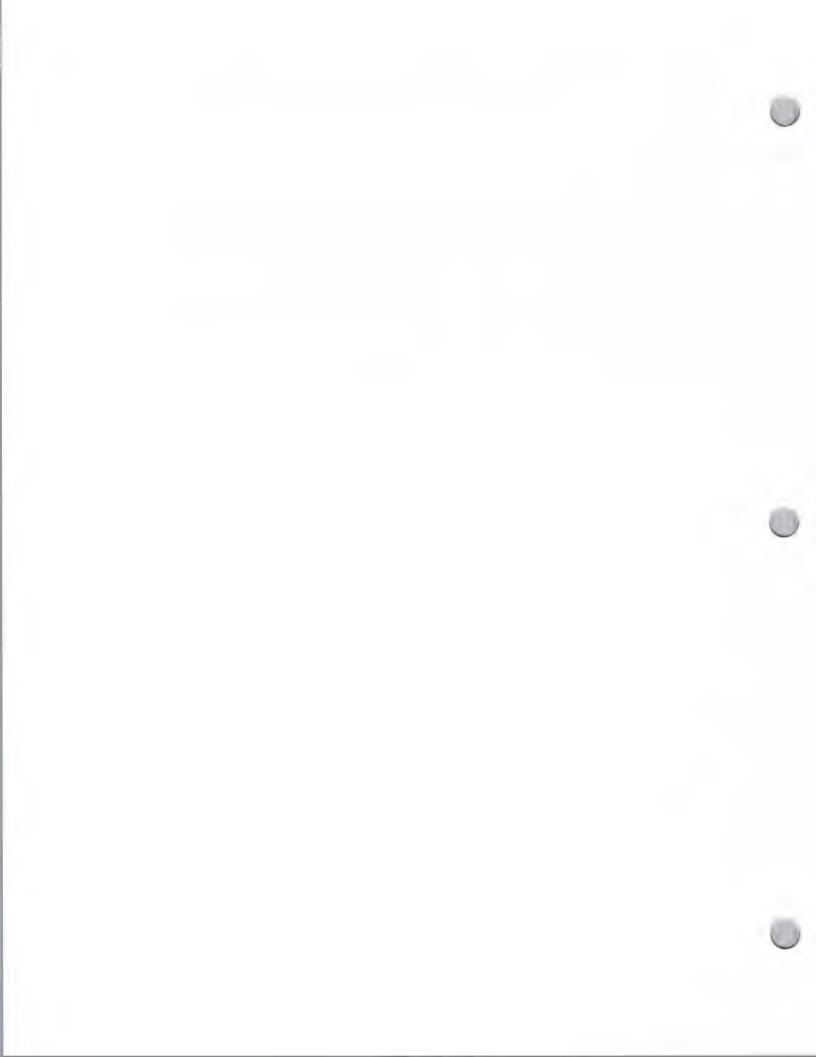
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Maximizing Results

When writing your press release, it is important to remember to use active verbs and short sentences and paragraphs. Keep to the facts and avoid adjectives and hyperbole. The editor will discount any claims that cannot be substantiated, such as the product being the "best," "unique," "most powerful," and so on. Keep your releases short (one to two pages), and the style consistent. Editors receive many press releases daily, so brevity and clarity are appreciated.

Once you have written your press release, contact the publication to find out who should receive it; typically, it is the editor. Let the editor know that you will send the press release. If your press release is used, send the editor a thank-you note.

Apple and the Apple logo are registered trademarks of Apple Computer, Inc.





Contact:

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Cynthia Macon (408) 973-5448

APPLEFAX MODEM NOW AVAILABLE

CUPERTINO, California--July 18, 1988--Apple Computer, Inc. announced today that it has begun shipment of the AppleFaxTM Modem. The AppleFax Modem gives Apple® Macintosh® users a convenient method of sending and receiving richly integrated, high-quality graphic and text files between the worldwide network of facsimile machines and other AppleFax-equipped Macintosh computers.

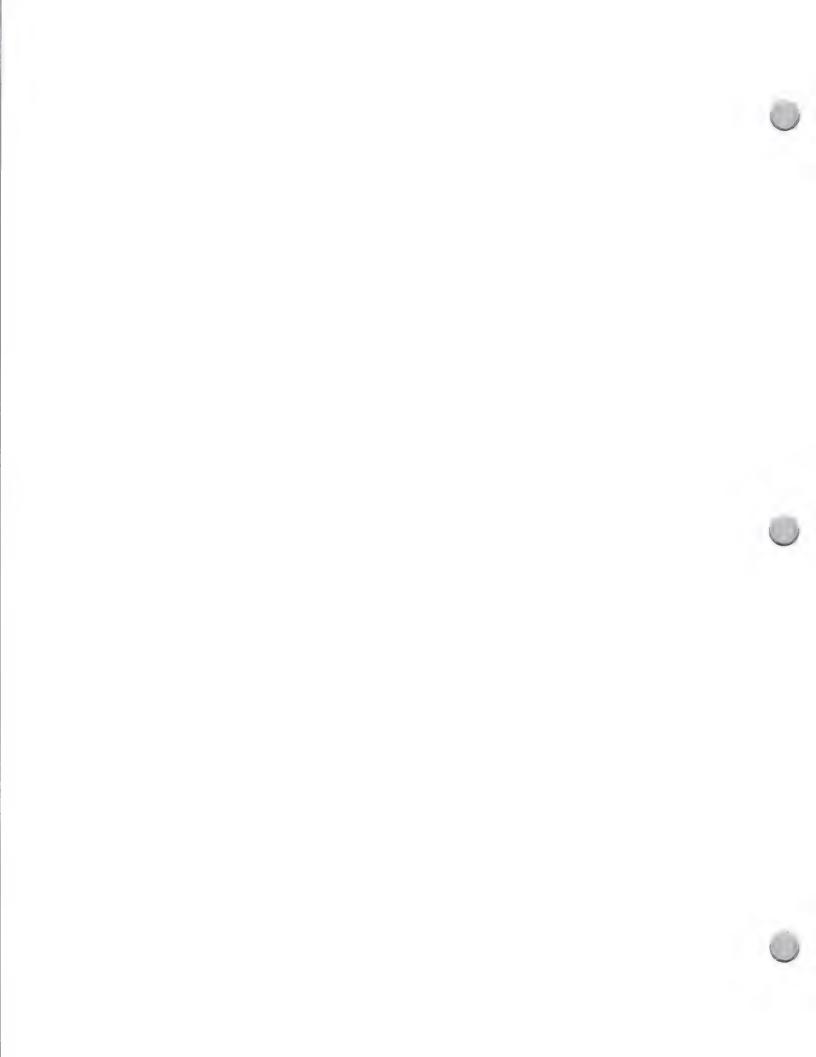
"Apple delayed shipment of the AppleFax Modem in order to make enhancements to the product," stated AppleFax Modem product manager Cam Roberson. "The AppleFax Modem extends the communication capabilities of the Macintosh and is an important element of our Graphics and Image Processing System."

The AppleFax Modem, introduced in August 1987, is compatible with Group 3 international standard facsimile machines. Operating at a transmission speed of 9600 baud, it provides an easy form of transferring documents between the three million-plus facsimile-equipped business locations worldwide.

The AppleFax Modem includes two pieces of software: AppleFax Resource and AppleFax Application Program. With the AppleFax Resource, any Macintosh file can be converted into facsimile format for immediate transmission to Group 3 facsimile machines or can be saved for later transmission. For the user, this process is as simple and easily accomplished as selecting and printing a Macintosh document.

The AppleFax Application Program allows Macintosh computers to send and receive facsimile and Macintosh files while providing the functionality and programming capability of high-end facsimile machines. It features multiple file transmission





capability, the ability to create distribution lists and address books, and generates detailed usage and activity reports. Automatic time transmission allows facsimile files to be sent or received without supervision as long as the AppleFax Application is running.

Additional peripheral devices, such as the Apple Personal Modem, can also be daisy chained via an auxiliary port on the AppleFax Modem.

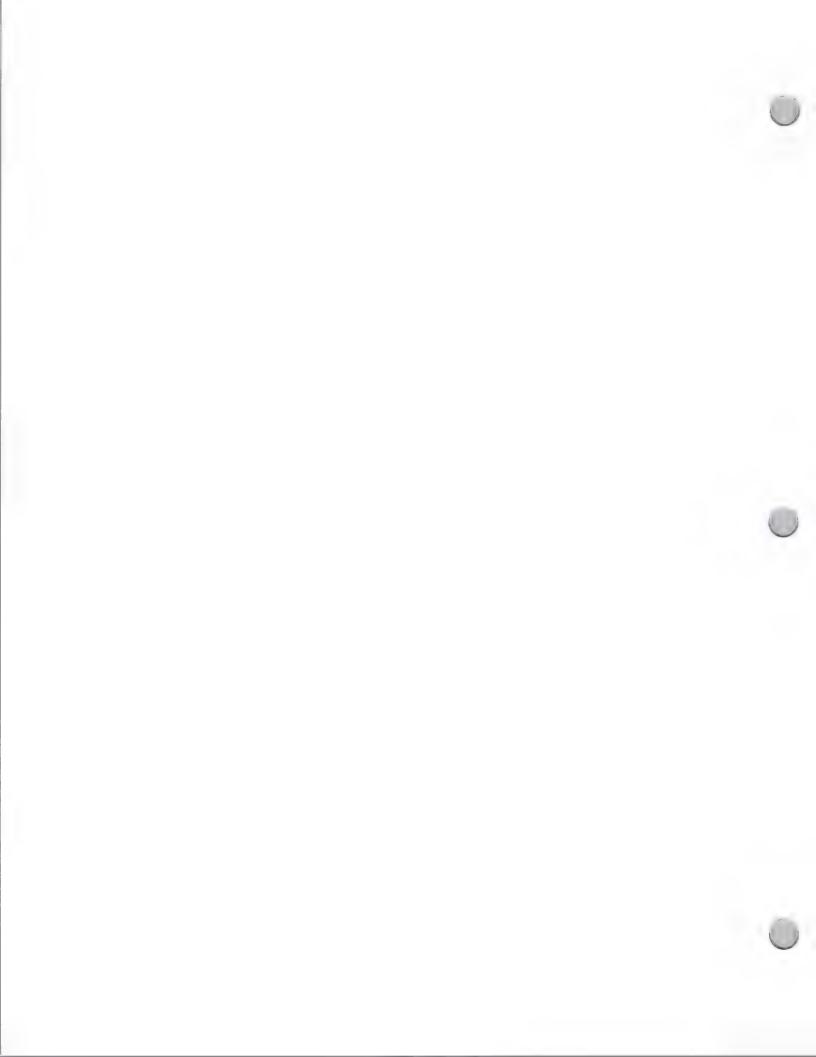
Compatible with the entire Apple printer family, received facsimile transmissions can be printed on the ImageWriter®, ImageWriter LQ, or LaserWriter® II printers.

In addition to the AppleFax Resource and AppleFax Application Program software, the AppleFax Modem includes high quality LQ Fonts, a user guide, a power unit and an RJ-11 telephone cable. It requires System Software Version 6.0, an Apple System Peripheral-8 Cable, a standard single-line telephone outlet with an RJ-11 modular jack and is compatible with the Macintosh Plus, SE or II computers.

The AppleFax Modem has a suggested retail price of \$699 and is currently available through Apple resellers nationwide.

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Apple, the Apple logo, Macintosh, ImageWriter and LaserWriter are registered trademarks of Apple Computer, Inc. AppleFax is a trademark of Apple Computer, Inc.





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The sources that are listed below will consider writing about software and peripheral products announcements and/or written reviews. You should send them a full working version of your product, complete with documentation, product literature, a press release, and a company profile.

Business/General	Product Focus	Contact
A+ Magazine 11 Davis Drive Belmont, CA 94002	Apple II	Shanon Cullen (415) 378-5670
AI Expert 500 Howard Street San Francisco, CA 94105	Macintosh and Apple II	Lisa Stapleton (415) 397-1881 Ext. 394
Apple IIGS Buyers Guide Redgate Comm. Corp. Beach and Financial Center 660 Beachland Blvd. Vero Beach, FL 32963	Apple II	Paul Pinella (617) 229-6500
Apple's On-Line 34 Spencer Drive Bethpage, NY 11714	Macintosh and Apple II	Neil Shapiro (516) 735-6924
Billboard 9107 Wilshire Blvd.,#700 Beverly Hills, CA 90210	Macintosh and Apple II	Jim McCullaugh (213) 273-7040
Burns & Venit 3915 24th St., #D San Francisco, CA 94114	Macintosh	Diane Burns (415) 550-1110
Byte 1 Phoenix Mill Lane Peterborough, NH 03458	Apple II	Anne Lent (603) 924-9281
C.A.L.L. Apple 290 SW 43rd Street Renton, WA 98055	Apple II and IIGS	Kathryn Sutner (206) 251-5222
Computers in Accounting 1 Penn Plaza, 40th Floor New York, NY 10119	Macintosh	Jules Gilder (212) 971-5557



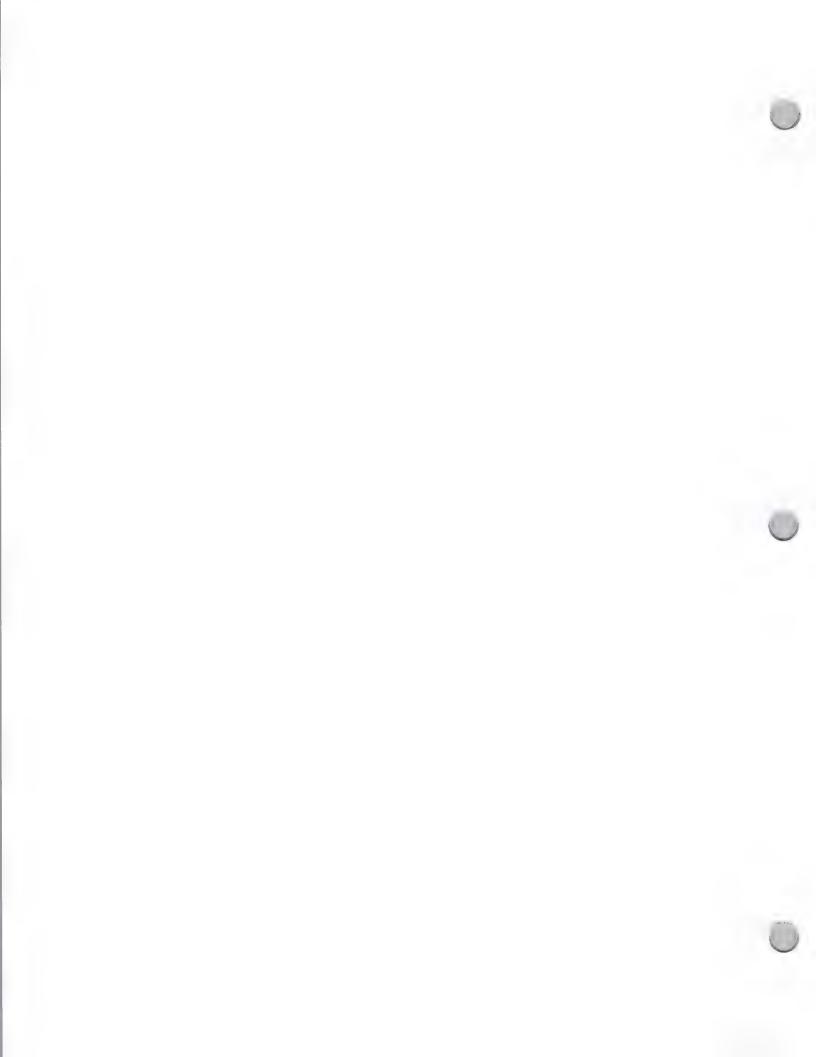


Public Relations		October 1, 1988
Business/General	Product Focus	Contact
Computer Currents 5720 Hollis Street Emeryville, CA 94608	Macintosh and Apple II	David Needle (415) 547-6800
Computer Dealer P.O. Box 1952 Dover, NJ 07801	Macintosh and Apple II	Tom Farre (201) 361-9060
Computer Decisions Magazine Glenpoint Centre East Degrew Ave. Teaneck, NJ 07666	Macintosh and Apple II	Mary Jander (201) 487-8200
Computer Language 500 Howard Street San Francisco, Ca 94105	Macintosh and Apple II	J.D. Hildebrand (415) 397-1881
Computer Dealer Monthly 3550 Wilshire Blvd., #660 Los Angeles, CA 90010	Macintosh and Apple II	Donna Flyod (201) 361-9060
Computer Resller News 600 Community Drive Manhassett, NY 11030	Macintosh and Apple II	Nancy Trespasz (516) 365-4600 Ext. 5939
Computer and Software News 425 Park Avenue New York, NY 10022	Macintosh and Apple II	Stuart Feil (212) 371-9400 x480
Computer Systems News 600 Community Drive Manhassett, NY 11030	Macintosh and Apple II	Jeff Weingart (516) 562-5929
ComputerWorld P.O. Box 9171 Framingham, MA 01701	Macintosh and Apple II	Sally Cusack (617) 879-0700
ComputerWorld Focus P.O. Box 9171 Framingham, MA 01701	Macintosh and Apple II	Ann Dooley (617) 879-0700
Data Base Management System 501 Galvaston Drive Redwood City, CA 94063	Macintosh and Apple II	Jim Fawcette (415) 366-3600



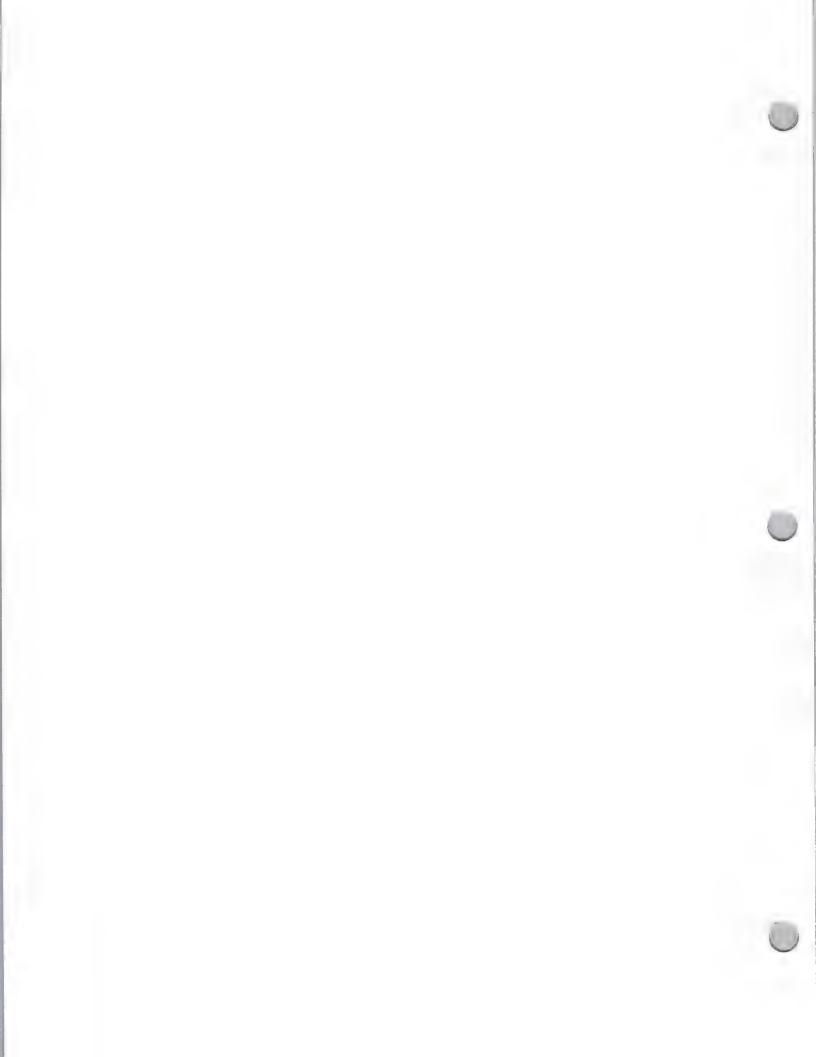


Public Relations		October 1, 198
Business/General	Product Focus	Contact
Data-Based Advisor 4010 Morana Blvd. #200 San Diego, CA 92117	Macintosh and Apple II	David Kalman (619) 483-6400
Datamation 249 W. 17th Street New York, NY 1001	Macintosh and Apple II	Mary Flynn (212) 645-0067
Electronic Business 275 Washington Street Newton, MA 02158	Macintosh and Apple II	Al Furst (617) 964-3030
Electronic Education 1311 Executive Center Drive Talahasse, FL 32301	Macintosh and Apple II	Sally Warner (904) 878-4178
Electronic Eng. Times 600 Community Drive Manhassett, NY 11030	Macintosh and Apple II	Rick Doherty (516) 562-5624
Electronic Learning 730 Broadway New York, NY 10003	Macintosh and Apple II	Jack Roberts (212) 505-3046
Electronic News 2479 E. Bayshore Palo Alto, CA 94303	Macintosh and Apple II	John Thompson (415) 496-4001
Electronics 10 Holland Dr. Hasbrouck Heights, NJ 07604	Macintosh and Apple II	Jack Schandle (201) 393-6000
Goodman, Danny (Freelancer) 155 Dolphine Avenue P.O. Box 1076 El Granada, CA 94018	Macintosh	Danny Goodman (415) 726-4739
High Technology Business 214 Lewis Wharf Boston, MA 02110	Macintosh	Brian O'Neil (617) 723-6611
INC. Magazine 15 Central Way, #197 Kirkland, WA 98033	Macintosh	Cary Lu (206) 821-2988



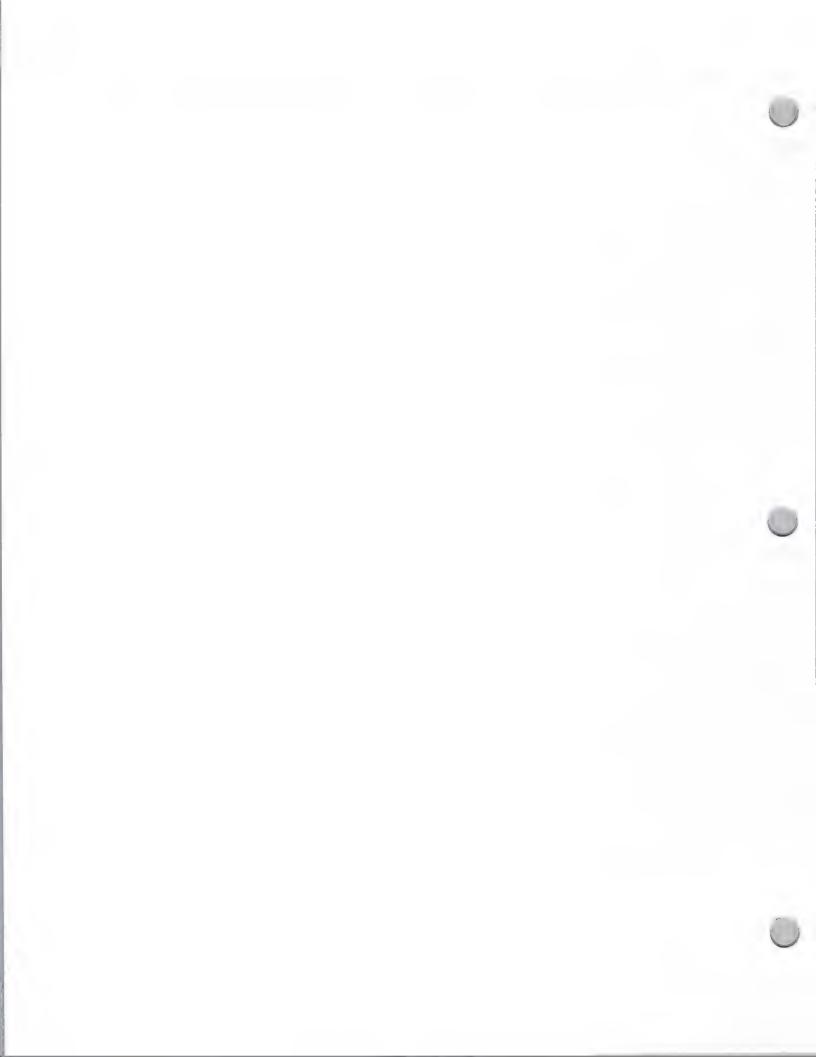


Public Relations		October 1, 1988
Business/General	Product Focus	Contact
InCider IDG/Peterborough 80 Elm Street Peterborough, NH 03458	Apple II	Lafe Low (800) 441-4403
InfoWorld 1060 Marsh Road, # C200 Menlo Park, CA 94025	Macintosh and Apple II	Serg Timachess (415) 328-4602
Loeb, Laurence H. (Freelancer) PCB Enterprises P.O. Box 925 Wallingford, CT 06492	Macintosh and Apple II	Laurence H. Loeb (203) 269-6903
MacApple 290 SW 43rd Street Renton, WA 98055	Macintosh and Apple II	Andy Himes (206) 251-5222
MACazine 8008 Shoal Creek Blvd. Austin, TX 78758	Macintosh	Bob LeVitus (512) 467-4550
MacBriefs P.O. Box 2178 Huntington Beach, CA 92647	Macintosh	Taylor Barcroft (714) 842-0518
Macintosh Buyers Guide Redgate Publishing Beachland Financial Center 660 Beachland Blvd. Vero Beach, FL 32963	Macintosh and Apple II	Jordan Gold (305) 231-6904
MacGuide Magazine 550 Wadsworth Blvd. #500 Lakewood, CO. 80226	Macintosh	Gary Meyer (CA off.) (303) 935-8100
MacTutor 1240 Van Buren, #105 Anaheim, CA 92807	Macintosh and Apple II	David E. Smith (714) 630-3730
MacUser 950 Tower Lane Foster City, CA 94404	Macintosh	Steve Bobker (415) 378-5600



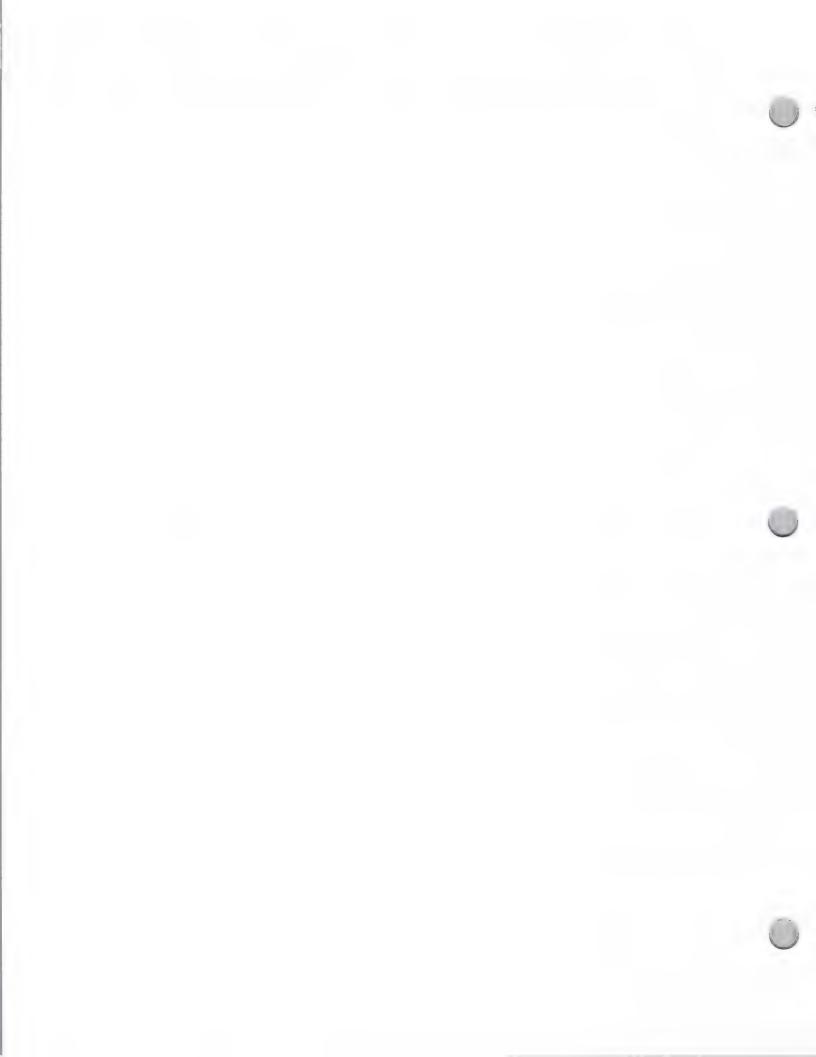


Public Relations		October 1, 1988
Business/General	Product Focus	Contact
MacWeek 525 Brannan St., #400 San Francisco, CA 94107	Macintosh and Apple II	Denis Klatskin (415) 882-7370
Macworld 501 2nd Street, #600 San Francisco, CA 94107	Macintosh	Editorial (415) 546-7722
Magid, Lawrence (Freelancer) Seybold Group 206 95th Western Ave., #132 Torrance, CA 90501	Macintosh and Apple II	Lawrence Magid (415) 366-9478
Micro Times 1118 Fresno Avenue Berkeley, CA 94707	Macintosh and Apple II	Steve Rosenthal (415) 527-2829
Mini-Micro Systems 275 Washington Newton, MA 02158	Macintosh and Apple II	Brian Gardner (617) 964-3030
Modern Office Technology 1100 Superior Avenue Cleveland, OH 44114	Macintosh and Apple II	Steven Brinndza (216) 696-7000
Nibble MicroSparc, Inc. 52 Domino Drive Concord, MA 01742	Apple II	David Krathwohl (617) 371-1660
NibbleMac MicroSparc, Inc. 52 Domino Drive Concord, MA 01742	Macintosh	David Krathwohl (617) 371-1660
Office Products Dealer 25 West 550 Geneva Road Wheaton, IL 60188	Macintosh and Apple II	Tim Triplett (312) 665-1000
Personal Computing 10 Mulholland Drive Hasbrouck Heights, NJ 07604	Macintosh and Apple II	Ron BelBruno(HW) (201) 393-6143 Carolyn Hlavaty(SW (201) 393-6194





Public Relations		October 1, 1988
Business/General	Product Focus	Contact
Personal Publishing 37 Barry Drive P.O. Box 647 Gales Ferry, CT 06335	Apple II	C.J. Weigand (203) 464-6188
PC Vendors Electronic Buyers Guide 17155 Newhope, Ste B Fountain Valley, CA 92708	Macintosh and Apple II	Bryan Menell (714) 540-6744
PC Week 110 Marsh Drive #103 Foster City, CA 94404	Macintosh	Jim Forbes (415) 378-5520
PC World 501 Second St., #600 San Francisco, CA 94107	Macintosh	Janet Walden (SW) Rex Farrance (HW) (415) 546-7722
Popular Mechanics 3550 Wilshire Blvd., #660 Los Angeles, CA 90010	Macintosh and Apple II	Ron Scibilia (213) 660-7507
Popular Science 8307 Zitola Terrace Playa Del Rey, CA 90293	Macintosh and Apple II	Jim Schefter (213) 827-3769
San Francisco Chronicle 901 Mission Street San Francisco, CA 94103	Macintosh and Apple II	Don Clark (415) 777-7126
San Francisco Examiner 110 Fifth street San Francisco, CA 94103	Macintosh and Apple II	John Dvorak Paul Freiberger (415) 777-7926
San Jose Mercury News 750 Ridder Park Drive San Jose, CA 95190	Macintosh and Apple II	Jim Bartimo (408) 920-5066
Schwabach, Bob (Syndicated Colu 359 Emily Street Philadelphia, PA 19148	mnist) Macintosh and Apple II	Bob Schwabach (215) 467-6074





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Business/General	Product Focus	Contact
Semaphore Signal 207 Granada Drive Aptos, CA 95003	Macintosh Software	Mike Gabrielson (408) 688-9200
Andrew Seybold's Outlook on Professionsl Computing 3235 Kifer Road #110 Santa Clara, CA 95051	Macintosh	Andy Seybold (408) 746-2555
68' Micro Journal Computer Publishing, Inc. P.O. Box 849 5900 Cassandra Smith Road Hixson, TN 37343	Macintosh	Larry Williams (615) 842-4600
The CAD/CAM Journal for the Macintosh Professional Koncepts Graphic Images 16 beaver Street, #401 New York, NY 10004	Macintosh	Kevin McCray (212) 425-4441
Video Review 902 Broadway New York, NY 10010	Macintosh and Apple II	Jim Neigs (212) 477-2200
Desktop Publishing	Product Focus	Contact
Desktop Publishing 363 Ridge Road P.O. Box 620025 Woodside, CA 94062	Macintosh	Cheryl Rhodes Tony Bove (415) 363-7757
Graphic Design 120 East 56th Street New York, NY 10022	Macintosh and Apple II	Susan Benson (212) 759-8813
Personal Publishing P.O. Box 390 Itasca, IL 60143	Macintosh	Terry Ulick (312) 250-8900
Public Relations Journal 33 Irving Place New York, NY 10003	Macintosh and Apple II	Meryl Davids (212) 995-2266



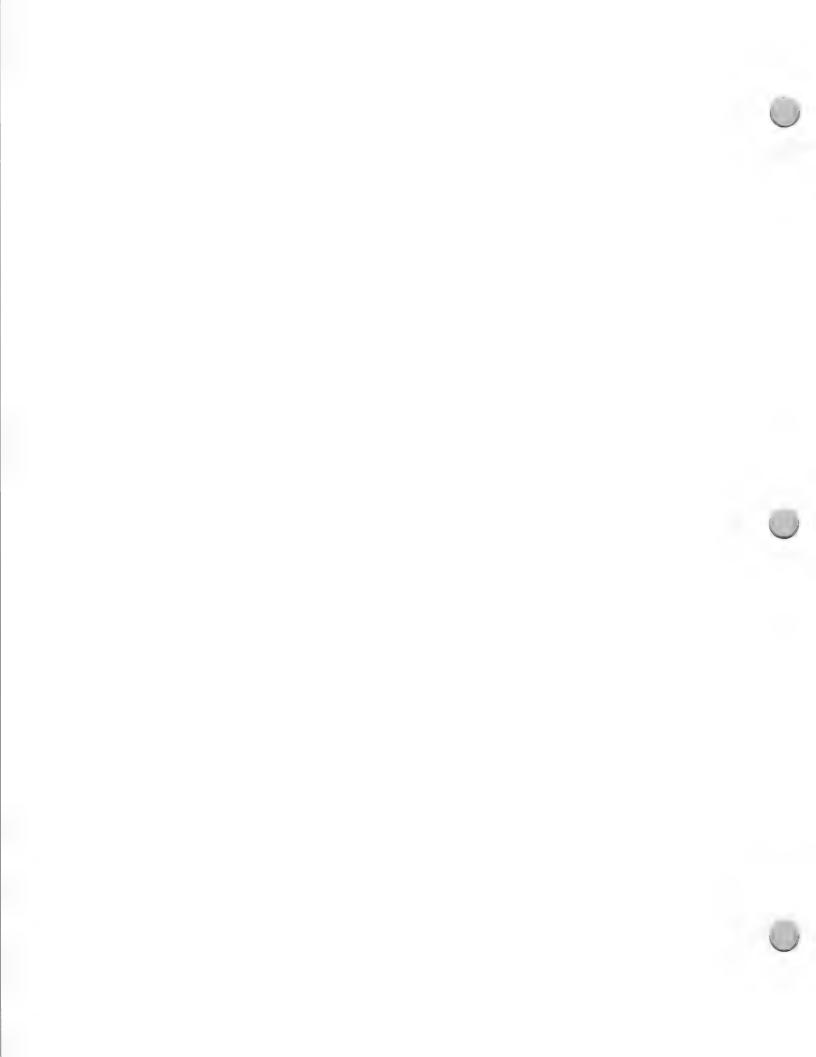


Public Relations		October 1, 198
Desktop Publishing	Product Focus	Contact
Publish! 501 Second St., #600 San Francisco, CA 94107	Macintosh	David Hopkins (415) 546-7722
The Seybold Report on Publishing Systems 6922 Wildlife Road Malibu, CA 90265	Macintosh	Jonathan Seybold (213) 457-5850
Legal	Product Focus	Contact
ABA Journal 83 S. King St., #100 Seattle, WA 98104	Macintosh Software	Larry Johnson (206) 621-1045
Higher Education	Product Focus	Contact
National Collegiate Software Clearinghouse NCSU Box 8101 Raleigh, NC 27695	Macintosh and Apple II	David Garson (919) 737-3067
School & College Product News 1100 Superior Avenue Cleveland, OH 44114	Macintosh and Apple II	Roger Morton (216) 696-7000
Social Science Microcomputer NCSU Box 8101 Raleigh, NC 27695	Macintosh and Apple II	David Garson (919) 737-2468
The Chronicle of Higher Ed 1255 23rd St. NW, #700 Washington, DC 20037	Macintosh	Judith Turner (202) 466-1063
K-12 Markets	Product Focus	Contact
American School Board Journal 1680 Duke Street Alexandria, VA 22314	Apple II	Jim Collins (703) 838-6724





Public Relations		October 1, 198
K-12 Markets	Product Focus	Contact
Classroom Computer Learning 2169 Francisco Blvd. E #A4 San Rafael, CA 94901	Macintosh and Apple II	Holly Brady (415) 457-4333
Computing Teacher Journal CCE University of Oregon 1787 Agate Street Eugene, OR 97403-9905	Macintosh and Apple II	Julie Poague (503) 686-4414
Curriculum Product Review 5 River Bend Stamford, CT 06907	Macintosh and Apple II	Howard Reed (203) 358-9900
Education Week 4301 Connecticut Ave. NW Washington, DC 20008	Apple II	Peter West (202) 364-4114
Electronic Learning 730 Broadway New York, NY 10003	Macintosh and Apple II	John Goodspeed (212) 505-3051
L earning 1111 Bethlehem Pike Springhouse, PA 19477	Apple II	Tony Prete (215) 646-8700
Feaching/K–8 40 Richards Ave. Norwalk, CT 06854	Apple II	Patricia Broderick (203) 855-2650
Consumer Market	Product Focus	Contact
Home Office Computing 730 Broadway New York, NY 10003	Macintosh and Apple II	David Hellerman (212) 505-3575
Parents 685 Third Ave., 29th Flr. New York, NY 10017	Apple II	Wendy Schuman (212) 878-8700



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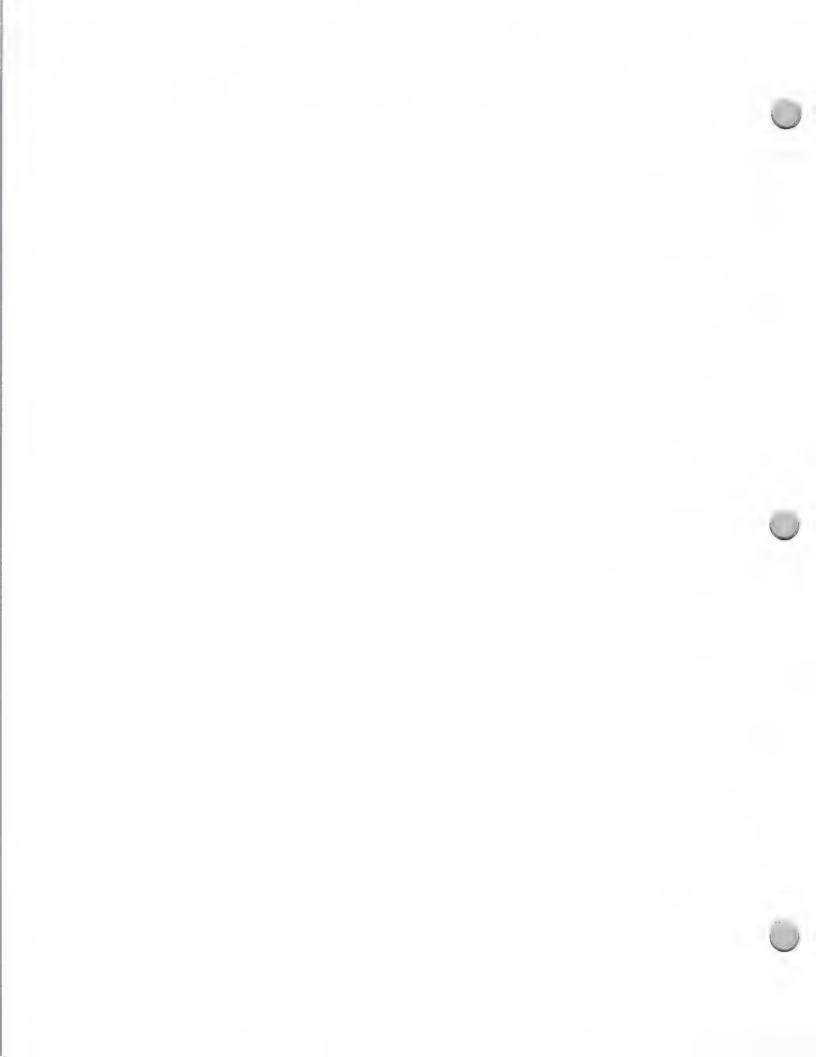
Television

The Computer Show 1118 Fresno Avenue Berkeley, CA 94707 **Product Focus**

Macintosh and Apple II

Contact

Steve Rosenthal (415) 527-2829





Press Kit Tips

Public Relations

May 1, 1987

Press Kit Checklist

Press kits can vary according to your company type, and the type of media to which you are sending the information. However, a complete kit typically contains the following items:

- · Cover letter to the editor
- · Press release
- · Company profile
- Black and white photos with captions (screen shots, and so on.)

Other possible enclosures, depending on your purpose and budget, include the following:

- · A one-page list of examples of some software package applications
- · A sample of the documentation
- · An actual demonstration software disk
- · News clips about your product





Speaking to User Groups

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Volunteering to speak to user groups in your area or while on the road provides an ideal opportunity for you to effectively share information about your product with these groups. They will strongly welcome your participation at their meetings.

In order to locate the user groups, you should check your local newspaper for listings in your area or contact an Apple operator at the toll-free number 800-538-9696, ext. 500. The operator will provide you with the addresses and phone numbers of user groups in the area that you are interested in visiting. You must provide the operator with the city zip code. Note that you are limited to receiving the names of three user groups per call.

The following tips for speaking at user groups were edited from a brochure written by The Boston Computer Society, a user group with a membership of 19,000 nationwide.

Length

Figure out in advance with the user group officer how much time you are allocated for the talk. Keep it as brief as possible. You should plan on speaking and demonstrating for about 30 minutes, and absolutely no longer than 40 minutes. Also, plan on fielding questions afterward for about 5 to 10 minutes.

The Audience

User groups are made up of a diverse group of people. They span every age, interest, and social and economic group. They range from consumers who have never touched a computer to leading industry executives. It is suggested, therefore, that you not make any major assumptions about the expertise or interests of your audience. Avoid spending a lot of time on areas that may only be of interest to a small segment of the audience (such as highly technical issues, special applications, and so forth).

Jargon

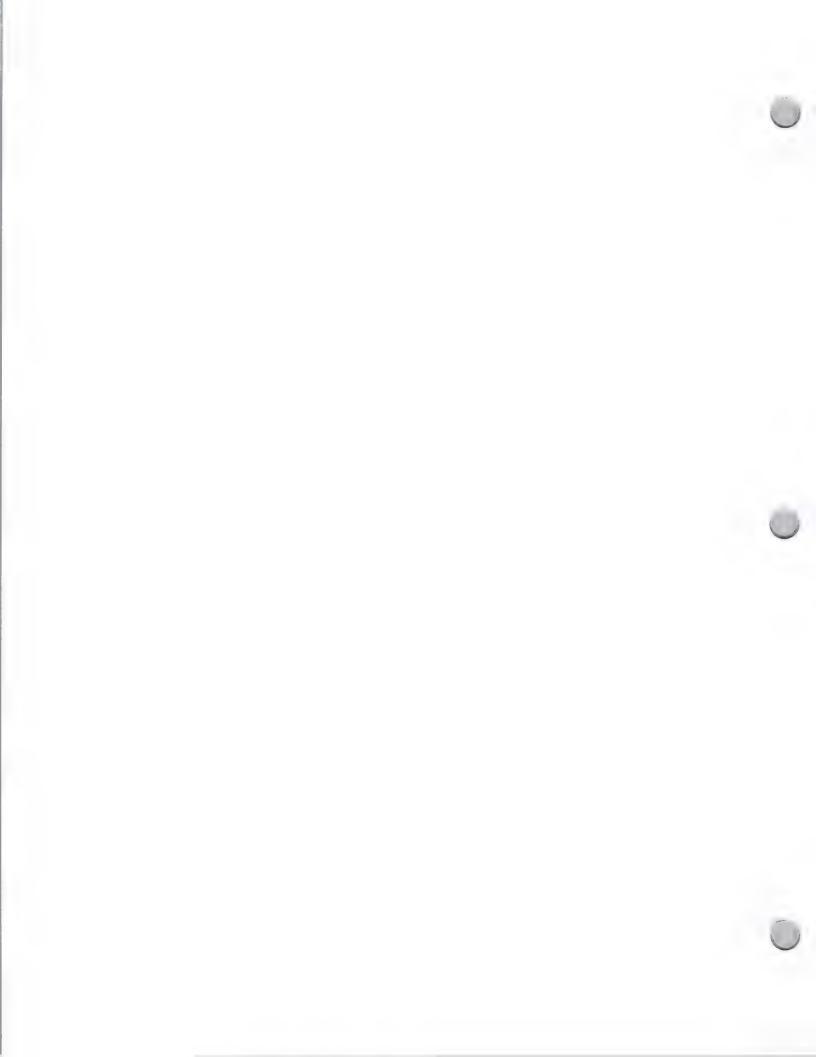
Please don't use computer jargon in your presentation. It is terribly intimidating to newcomers. Your goal is to inform and educate; "computerese" can be a major obstacle. Try not to use buzzwords, except where they are absolutely necessary. On the other hand, keep in mind that most members have a basic understanding of computers, so you don't need to spend a lot of time giving background introductory information.

Demonstrations

Product demonstrations, slide shows, video presentations, and other audiovisual support during your talk can dramatically increase your audience's enthusiasm. It is strongly encouraged that you integrate demonstrations and visual materials into your presentation—they will greatly enhance your effort.

Company Hype

The purpose of your talk should be informational—not sales-oriented. Stay away from sales tactics





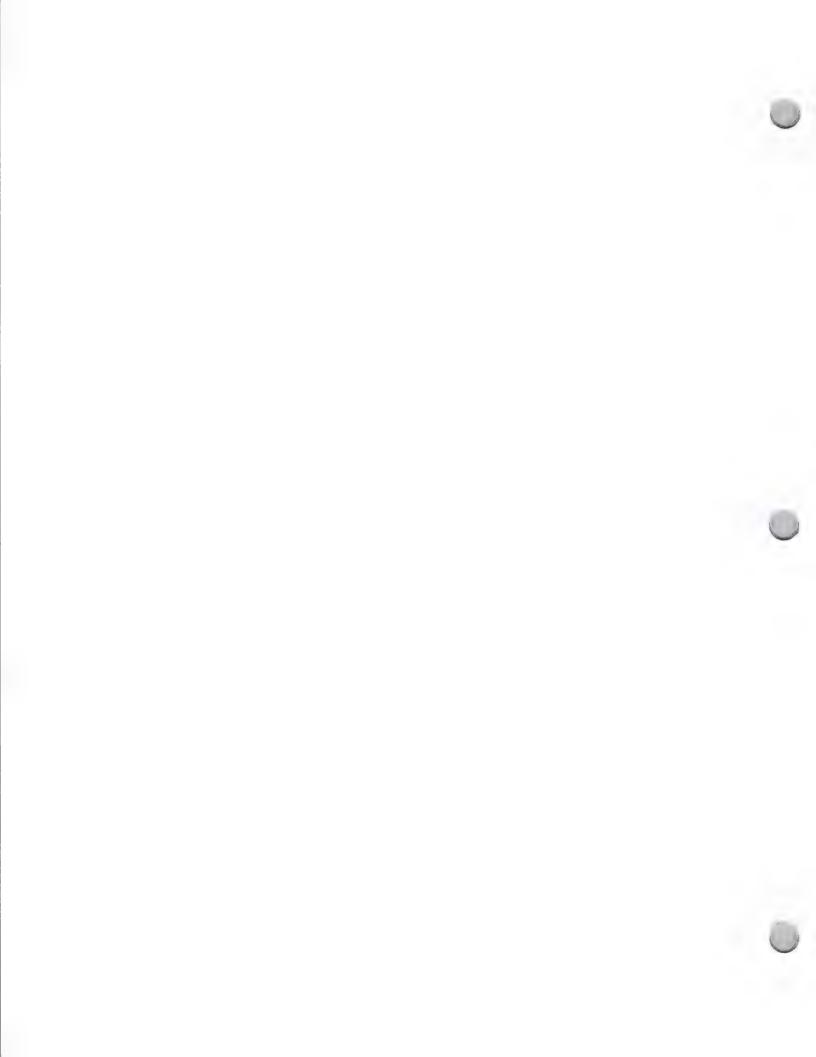
Speaking to User Groups

Public Relations October 1, 1988

and corporate hyperbole.

Question and Answer

The question-and-answer period following talks can be an interesting time for both the audience and the speaker. Unfortunately, it can also get out of hand. When a question is highly technical or very narrow in scope, you should defer answering it and encourage the asker to come up after the meeting and discuss it with you personally. It is important that you not spend a lot of time on questions that are of little interest to most of the audience, or you will lose their attention. Also, you'll notice that questions tend to become more technical and specific as the question-and-answer period progresses; at a certain point, it is a good idea to "take one last question" and then encourage attendees to talk with you afterward about their other questions.





Third Party Press Kits

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As an Apple Certified Developer, you have the opportunity to participate in an Apple Third Party press kit at every AppleFest and MacWorld trade shows. The Public Relations group at Apple will distribute the press kits to over 2,000 key magazine, newspaper and industry influencers at each AppleFest and MacWorld trade show we attend.

Eligibility

If you are ready to make the following announcements, your product information is eligible for inclusion in Apple's Third Party Press Kit:

• A brand new product for the first time at the trade show

An upgrade or revision of a product for the first time at the trade show

The expected ship date of your new or upgraded product

Note: The key qualification factor is "for the first time". If your product has been previously announced, it cannot be included in the press kit.

The Application

To apply to participate in this program, you will need to fill out a Press Kit Form. These forms are available in the "Developer Programs" folder on AppleLink, which is located in the Developer Services bulletin board. AppleLink is the preferred method of transmission, but if you do not have AppleLink, you can call the Developer Programs Hotline at (408) 937-4897 and request that a form be mailed to you. Fill out and return one form for each product that you are announcing. Sorry, we cannot accept press releases.

Deadlines

To participate in Third Party Press Kits for future MacWorld Expos or AppleFest trade shows, plan to return your form(s) to us one month prior to the show. If you're not sure about exact show dates, keep a watch on Appledirect (your monthly newsletter) and Apple viewpoints (your weekly newsletter). They will show the most current trade show information.

For More Information

Apple Computer, Inc. Attn.: Developer Programs 20525 Mariani Avenue, M/S 51-W Cupertino, CA 95014

Developer Programs Hotline Number: (408) 973-4897

AppleLink: DEVSERVICES FAX: (408) 973-2607



Market Research Resources

Market Research

October 1, 1988

Market research information can be a very important and helpful way to enhance your business decisions. Market research information can be obtained indirectly through publications that frequently print pie graphs, bar charts, or market research-related feature articles or directly form a market research firm.

The following is a list of periodicals that frequently include market research information in their publications and market research firms that can provide you with the services and information you need. Please note that these are not comprehensive lists and are not meant to act as an endorsement by Apple Computer, Inc.

If you would like to be added to either of these lists, please contact Peggy Jensen at (408) 973-4897 or AppleLink JENSEN.P.

Publications

Communications Industry Report International Data Corporation 5 Speen Street, Box 9015 Framingham, MA 01701 (617) 872-8200

ComputerWorld CW Communications 375 Cochituate Rd., Box 9171 Framingham, MA 01701-9171 (617) 879-0700

Distribution Views Future Computing, Inc. 8111 LBJ Freeway Dallas, TX 75251 (214) 437-2400

Infoworld 1060 Marsh Road, Suite C-200 Menlo Park, CA 94025 (415) 328-4602

Office Automation Reporting Service
International Data Corporation 5 Speen Street, Box 9015 Framingham, MA 01701 (617) 872-8200

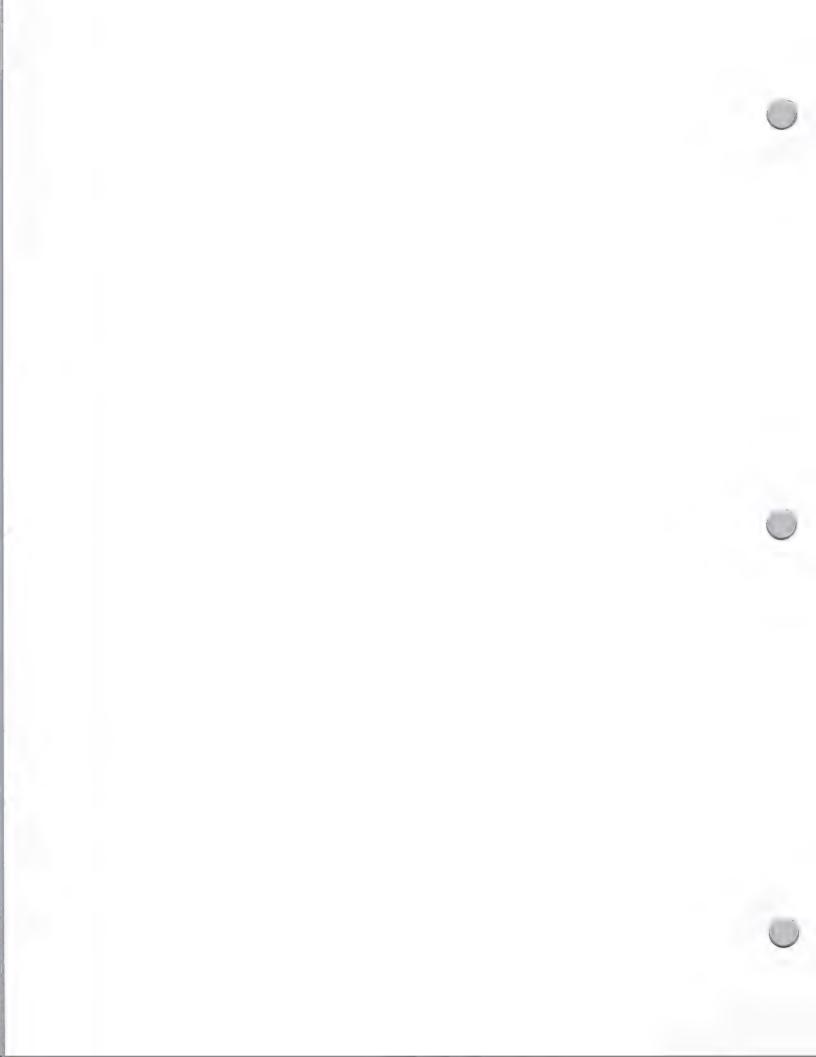
Computer Reseller News 600 Community Drive Manhasset, NY 11030 (212) 647-4078

DataPro 70; edp Buyer's Bible DataPro Research Corporation 1805 Underwood Blvd. Delran, NJ 08075 (609) 764-0100

Future Views Future Computing, Inc. 811 LBJ Freeway Dallas, TX 75251 (214) 437-2400

MacWorld 501 Second Street San Francisco, CA 94017 (415) 243-0505

T.H.E. Journal Information Synergy, Inc Box 17239 Irvine, CA 92713 (714) 261-0366





Market Research Resources

Market Research

October 1, 1988

Seybold Report on Office Systems Seybold Office Computing, Inc. 148 State Street, No. 612 Boston, MA 02019 (617) 742-5200

Market Research Firms

Dataquest 1290 Ridder Park Drive San Jose, CA 95131-2398 (408) 971-9000

InfoCorp 20833 Stevens Creek Blvd. Cupertino, CA 95104-2107 (408) 973-1010

LINK Resources Corp. 79 Fifth Avenue New York, NY 10003 (212) 627-1500

Future Computing 8111 LBJ Freeway Dallas, TX 75251 (214) 437-2400

IntelliQuest 400 West 15th, Suite 815 Austin, TX 78701 (512) 320-8585

If you would like to contact more market research firms, lists of market research firms can be found in the following publications. You may find these publications in your local library or by contacting the publishers at the addresses given below:

International Directory of Marketing Research Housing and Services American Marketing Association 310 Madison Ave., Suite 1211 New York, NY 10017 (212) 687-32800

Membership Directory and International Buyer's Guide to Marketing Services American Marketing Association 250 South Wacker Drive, Suite 200 Chicago, IL 60606 (312) 648-0536

Should you decide to use the services of a market research firm, keep in mind that the firm should be willing to:

- · Familiarize you with their entire operation and their procedures
- Tell you if a full market research study is even necessary
- Help you fulfill your own in-house study
- Encourage you to use only the necessary services
- Provide you with actionable information, not just data





K-12 Market Research

Market Research

October 1, 1988

Introduction

The K-12 market is large—and growing. Recent information from TALMIS, a market research firm, suggests that the microcomputer installed base will reach more than 2 million by August 1987. And according to TALMIS, 92 percent of public schools have one or more microcomputers. Because it is anticipated that schools will try to improve their computer/student ratios, the number of computers per school should continue to increase.

Computer usage

Currently, computers are primarily being used by teachers and students in lab and classroom settings. Most primary schools utilize microcomputers for remediation and enrichment. Most secondary schools, on the other hand, now use them as a regular part of instruction. And current trends indicate that computers are being used not only for instructional purposes, but also increasingly for administrative functions. In fact, 1986 TALMIS statistics showed that 48 percent of microcomputers in the K–12 market are used in school labs, 30 percent in classroom instruction, 6 percent in administrative offices, and the remaining 16 percent in a variety of areas, including library resource centers.

Apple® II computers are used primarily by students and teachers for instructional purposes. Apple computers are increasingly being used by administrative personnel to promote office productivity.

Selecting and purchasing a computer

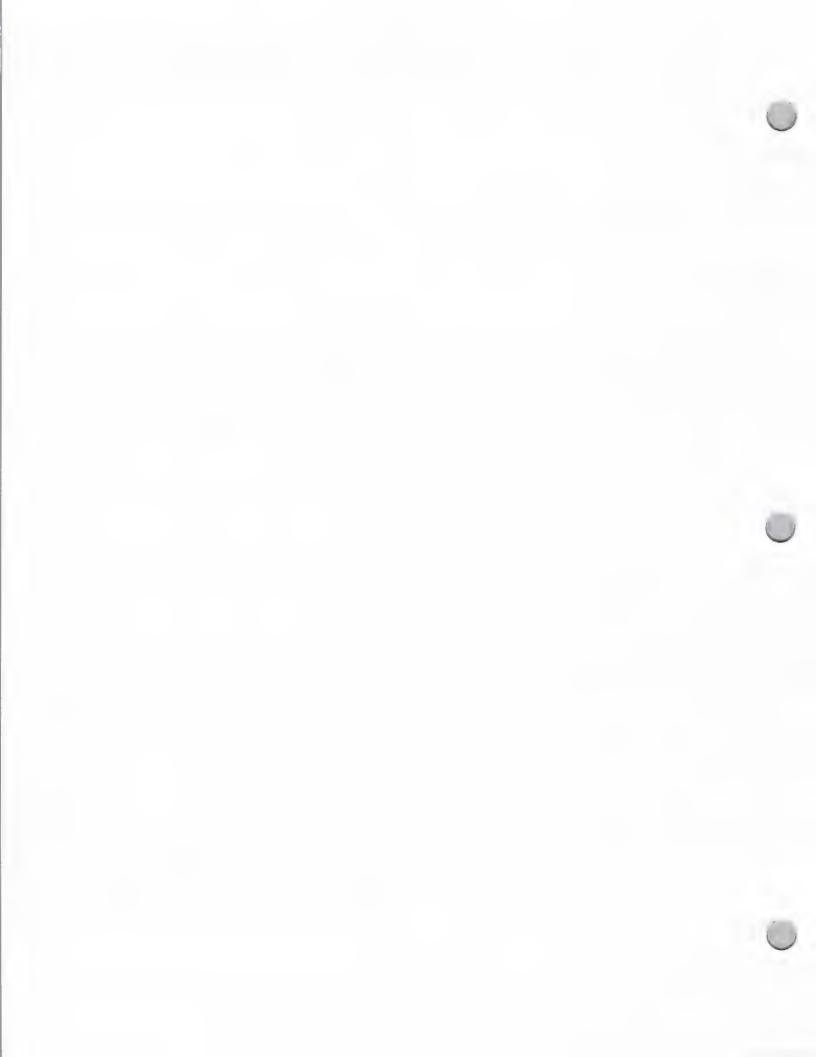
Evidence suggests that there are two groups that typically have the final authority to purchase computers in the K-12 market: principals assisted by a panel of educators, and district-level administrators. These are the key people in the K-12 market—the ones who decide the brand of computer and the number of units that will be purchased.

Studies indicate that 42 percent of public schools reported that they purchase the majority of their hardware directly from the manufacturer, 31 percent purchase their computers through a state contract, and the remaining 27 percent from a local computer retailer. A study by TALMIS found a clear pattern indicating that the larger the district, the greater the chance it will purchase directly from the manufacturer.

According to TALMIS, the following factors are taken into consideration when the purchaser is determining which computer to buy:

- Price cuts in hardware
- Availability of computer manufacturer's training programs
- Availability of quality software
- Enhanced computer graphics and sound capability
- New computer features

But these are not only the factors that educators and district administrators take into consideration. They are becoming increasingly computer literate, and spend more time researching various brands



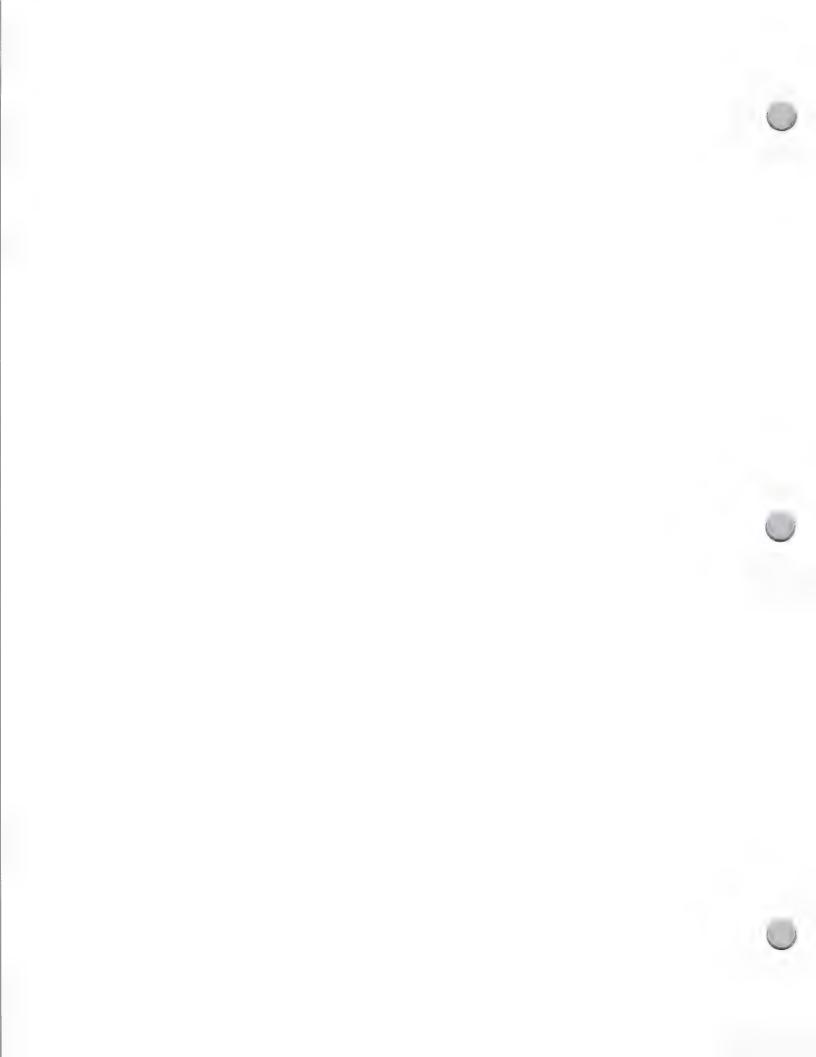


K-12 Market Research

Market Research October 1, 1988

of computers before making a final purchase decision. They look to manufacturers' computer workshops; computer demonstrations at trade shows and conventions; and brochures, catalogs, and newspapers for information that will help them make a purchase decision.

There is some indication that the decision-making process begins around the first of the calendar year, and that heavy purchasing and ordering generally occurs from late May to mid-July.





Legal Market

Market Research October 1, 1988

The Legal Market

The legal market offers attractive opportunities for developers who wish to focus their product and marketing strategies on a specific vertical market. It is a very profitable profession, and currently, there are only a few legal applications available on the Apple® MacintoshTM personal computer. This note is intended to inform you of the opportunities that exist today in the legal market. Although Apple's marketing programs will be targeted primarily at the attorney, we have provided you with information that will give you an understanding of the entire legal market.

While most lawyers are employed in private practice, they are also employed by corporations and in public practice (federal, state, and local government). More than 68 percent of the 710,000 lawyers in the U.S. are private practitioners, the majority of whom work in metropolitan areas. About 10 percent of all lawyers work for businesses as in-house counsel, an area that has seen dramatic growth over the past decade. Another 10 percent are employed by governmental agencies, the military, and federal and state judiciary systems. The remaining attorneys are working in alternate careers such as real estate, contract administration, etc. There are about 153,000 legal establishments in the U.S.

Private practice can be divided into four categories: large law firms, specialty firms, solo practioners, and small firms.

Large law firms serve corporations, banks, and governments. About 300 firms employ 50 or more attorneys. While few in number, these firms have an enormous impact on the U.S. economy.

Specialty firms concentrate on areas such as patent applications and labor relations, and tend to employ about 30 attorneys.

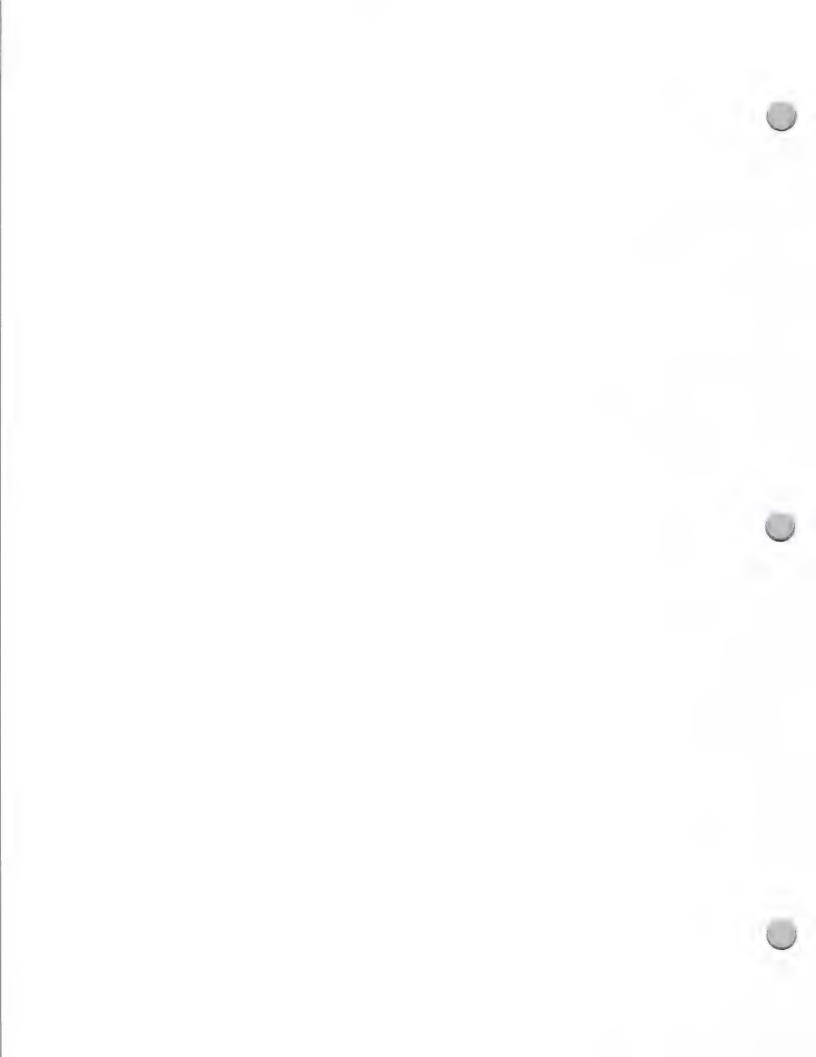
Private practice is dominated by solo practitioners and small firms, which employ about two-thirds of the legal profession. Solo practitioners and small firms (two to three partners) tend to offer a more general practice, handling real estate transactions, small-business issues, estate planning, probate, and marital problems. Individuals and small businesses are their primary clients.

Law Firm Automation

Market researchers estimate that 320,000 personal computers have been installed in legal establishments. They forecast sales of 100,000 to 125,000 new systems each year, plus rapid increases in replacement systems, from 64,000 systems in 1988 to more than 100,000 in 1990.

Law firms were quick to adopt the early technology of electronic typewriters and dedicated word processors, but they have been somewhat slower than other industries to replace these machines with personal computers. This is largely due to the significant initial capital outlays law firms incurred; in 1982, a typical dedicated word-processing system cost \$15,000 to \$25,000. As these older systems become obsolete, the trend is to replace them with the more versatile personal computer.

Currently, most of the installed computers appear on the desks of secretaries, paralegals, and other support staff members—relatively few attorneys are using computers. Some experts believe that





Legal Market

Market Research

October 1, 1988

attorneys have been slower to embrace computer technology for their personal use because of negative reactions to the first computers, which tended to perform data processing tasks and automate clerical activities. Although they were useful to the firm, these computers did not assist the attorney in the practice of law.

Prospects are brighter today, thanks to lawyers' increasing experience with computers in the home, young attorneys graduating with computer experience in college or law school, and the availability of computers such as the Macintosh, which are easier for them to learn and use. In addition, national and state bar associations are actively promoting computer usage, waging campaigns to educate attorneys on the benefits of automating their practices. In fact, Macintosh is gaining recognition as the system of choice for attorneys whose heavy time demands necessitate easy-to-learn, easy-to-use equipment. The result is likely to represent major opportunities for forward-thinking developers.

Apple and the Legal Market

Apple has taken a strong interest in this market and is actively lobbying the relevant special-interest groups. The Small Home Business Market within Apple's Business Marketing organization, headed by Tom Pavela, is focusing on the legal market.

Although Apple has not specifically targeted the legal market in the past, studies by the American Bar Association (ABA) indicate that Apple has a 9 percent share of the legal office market; moreover, 35 percent of computers owned by attorneys' families are Apple® computers. Over the past year, the leading bar associations have exhibited a dramatic increase in their interest in Macintosh. The highest level of interest exists in those bar associations that are most active in promoting computer literacy for lawyers.

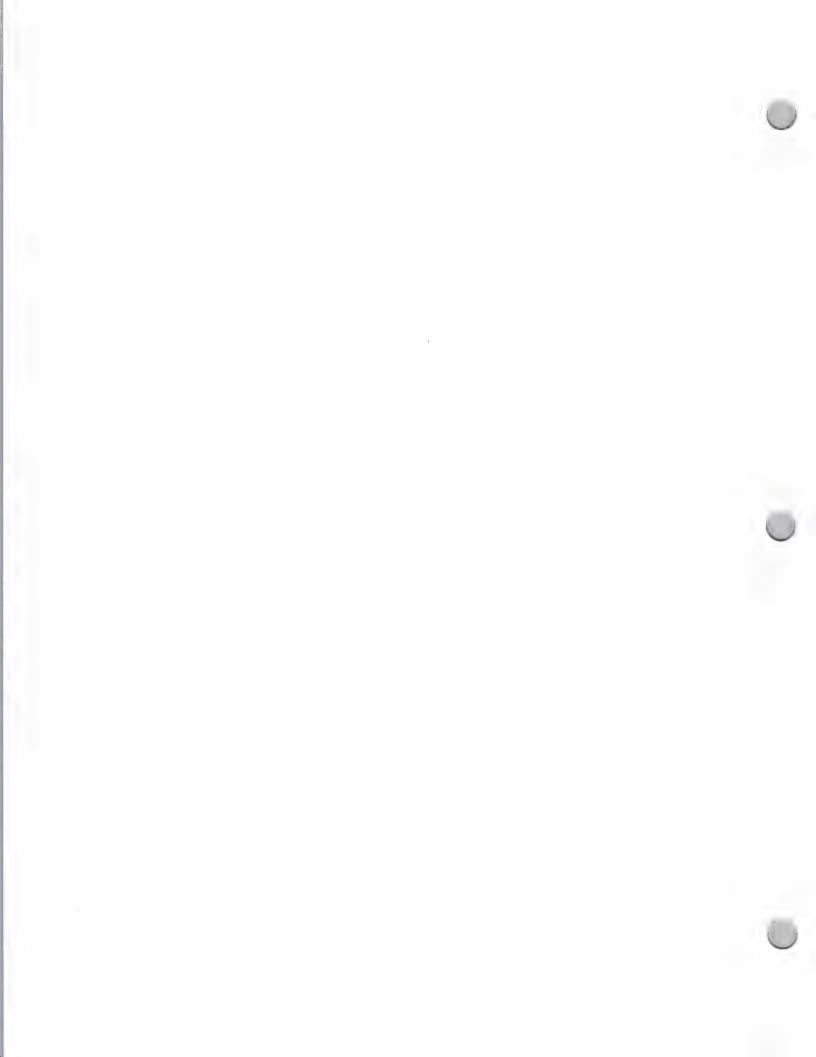
The availability of quality Macintosh-compatible software that meets lawyers' specific needs will be a critical factor in determining how quickly computers appear on attorneys' desks.

Opportunities

The lawyer's fundamental role is to organize, assimilate, and communicate information clearly and persuasively. As recently stated by Bryan Williams, president of a leading bar association, "Time and words are the stock in trade of lawyers, and documents are the tools of trade. Contracts, legal opinions, judgments, appointments, dockets, case reports, registry records—our profession is based on the carefully recorded word."

The attorney's challenge is to analyze, control, and manage the vast amount of information received and/or generated by a law office and to integrate it with information from many other sources. The results of reading, phone conversations, research, and face-to-face conversations must be converted to text. This text varies from brief notes, statutory forms, and contact addresses to complex and lengthy agreements.

Legal applications are usually divided into three areas: document processing, practice management, and finance/administration. Text and document processing predominate.



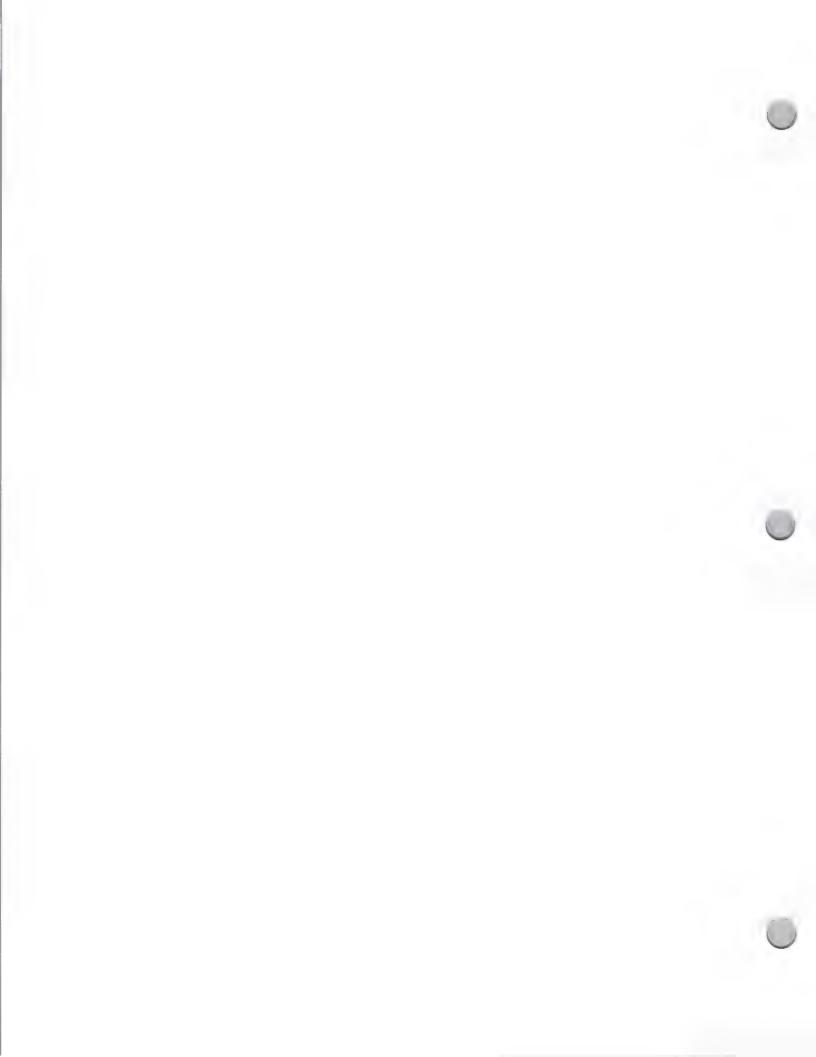


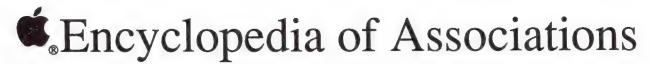
Legal Market

Market Research October 1, 1988

- Document Processing—This area involves "traditional" word processing, with the addition
 of specialized capabilities for law firms. These capabilities include idea processing and
 outlining, data entry and document assembly, optical character reading and scanning,
 proofreading aids, computer-assisted document-drafting aids, conferencing and
 simultaneous document editing, forms processing, and electronic mail and document
 transmission. There are also specialized research applications involving such information
 sources as LEXIS and WESTLAW. Desktop publishing is beginning to attract attention,
 and CD-ROM could play a significant role in law firms.
- Practice Management—These applications are often specialized forms of
 project-management software. Key applications include materials management, litigation
 support, scheduling and docket control, and conflict-of-interest detection. These
 applications tend to be specialized data-base applications.
- Finance/Administration—The basic applications in this area all help with practice accounting: time and billing, disbursement control, trust accounting, practice analysis, and periodic reporting.

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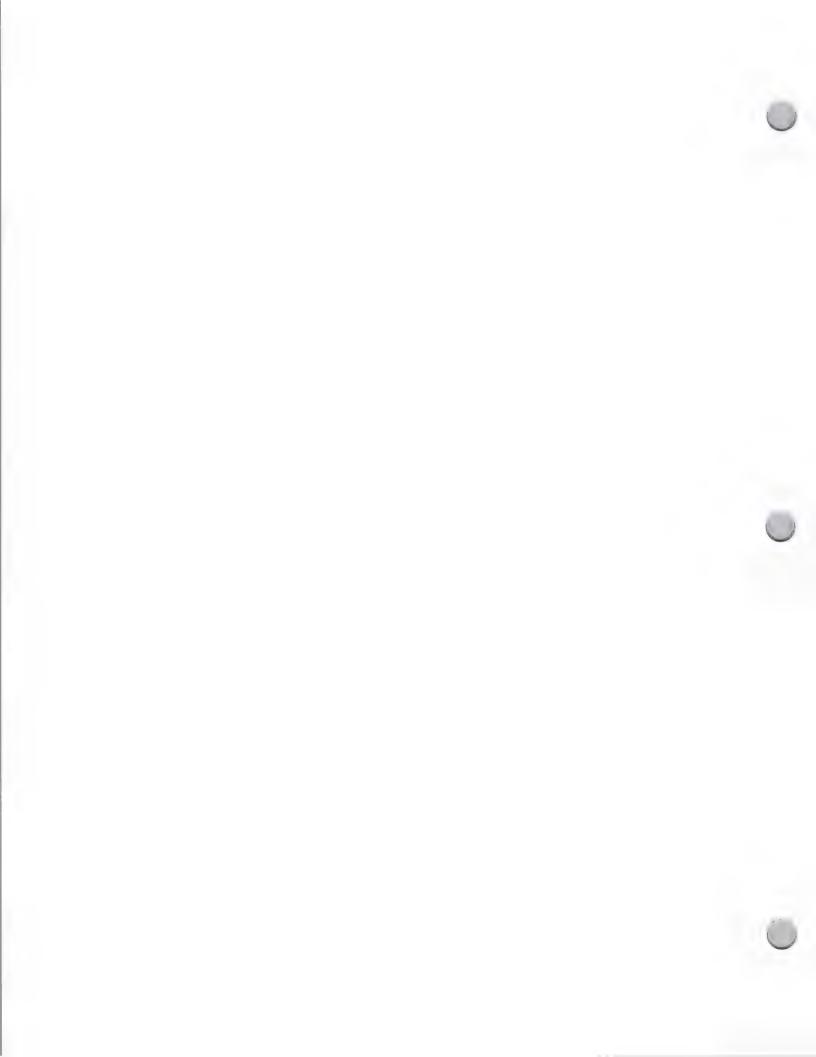
Market Research

August 1, 1987

Have you ever had trouble finding information on a particular industry or organization? Did you know that there is at least one association for almost every area of interest? There are associations specializing in aerospace, education, engineering, magazine publishing, legal issues, Boy Scouting, livestock production, information processing, music, real estate, medicine, dentistry, and business simulation/experimental learning.

In most cases, such associations can be very helpful in either providing you with industry information, or at the very least, pointing you in the right direction to find exactly what you need to know. For listings and descriptions of approximately 20,000 national and international organizations, just consult the *Encyclopedia of Associations* at your local library.

Remember, if you're having difficulty exploring a specific vertical market because no one knows anything about it, the *Encyclopedia of Associations* could be the key to a whole wealth of information.





Home Market Research

Market Research

October 1, 1988

Apple Computer defines a home computer as a computer that resides in the home and is primarily used as a tool for personal productivity, education, entertainment, and work-related business. By this definition, the Apple® IIc is considered a home computer. The following information provides you with an overview of Apple IIc customers and their standard purchasing process.

Demographics

Apple IIc computers have attracted buyers that fit the following profile: They typically have children ages 6–17, earn high incomes (\$35,000+), are well educated, and hold managerial or professional positions.

Selecting Computers

In the past, the decision to purchase a computer was usually made by the male member of the household. This is changing, and it now appears that the female member is taking a more active role. Potential buyers spend a lot of time educating themselves about computers before they make a purchase decision. They rely on the following sources for information: computer advertisements in trade journals, friends and relatives, salespeople, articles in general magazines and newspapers, coworkers, computer magazines, manufacturers' catalogs, brochures, computer demonstrations books, computer classes or workshops, computer shows, computer clubs, and computer rentals.

Purchasing a Computer

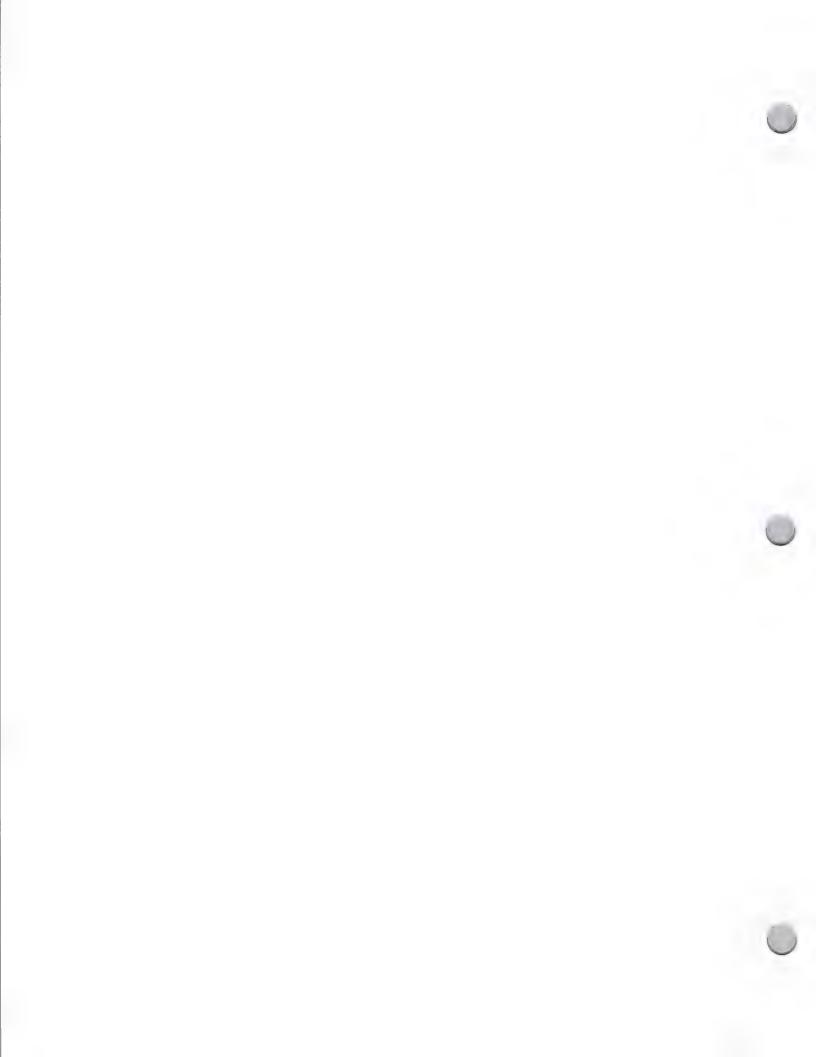
The average buyer shops at 5.1 stores before buying a computer. Based on research, shoppers look to computer stores, followed by department stores, consumer electronics stores and mail-order.

In the past, price was the most important criterion in selecting a home computer. Today, buyers consider a variety of other criteria. Among the current top considerations are having the same product at school or work; product features, such as compatibility and ease of use; software availability; and price. Additionally, strong emphasis is placed on after-sale support/service, maintenance, training, breadth of product line, helpful, knowledgeable salespeople, and company reputation. Consumers typically buy a printer, monitor, and disk drive as part of their system purchase.

The holiday season is the most important buying period for consumers. Most computers are purchased in the last quarter of the calendar year. Of all high-end home computers purchased in FY 1985, 49 percent were purchased during the months of October, November, and December. Purchases for the other quarters are less than half of this holiday level.

Computer Usage

Research shows that the most common Apple IIc home application is word processing, followed by entertainment, children's education, mail list/filing, data-base management, graphics for creative design, and job-related training. Whereas in the past, the applications were typically used by the male head of the households, this trend appears to be changing. The women and children in the households are using the computers more frequently.





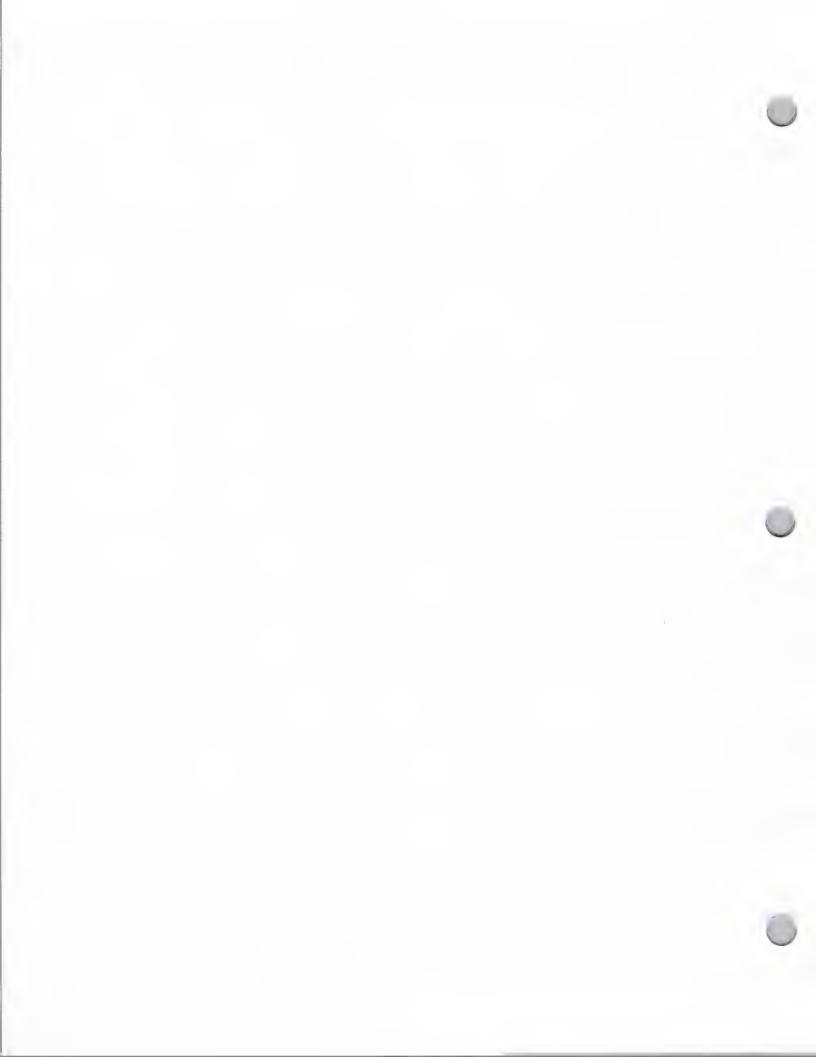
Home Market Research

Market Research

October 1, 1988

Consumer Market Trends

The consumer market is still in its infancy. According to Future Computing, the penetration in 1986 was 17.7 percent. It is expected to grow to 30.4 percent by the end of 1990. But, the market is not growing as quickly as was once projected. Current projections indicate that over the next few years, the market will grow at an average rate of 9 percent. Households with children will purchase twice as many computers as households without children through 1990. But the rate of growth for sales of computers to households without children will be slightly higher than that for households with children.





Business Market Research

Market Research

October 1, 1988

Macintosh New Milestones

During 1987, monthly sales of the Macintosh™ personal computer doubled, bringing the total sold since 1984 to approximately 2 million units. And according to Infocorp, a market research firm, for most of 1986, the Macintosh Plus was the top-selling personal computer sold by specialty retail stores. One thing that has contributed significantly to the accelerated sales growth of Macintosh is the acceptance of Macintosh in business.

The following information reflects the activity of the Macintosh:

Macintosh in Business

Personal computer sales are growing fastest in the business market. At the same time, statistics show that Macintosh is becoming a true mainstream business computer. Today, nearly two-thirds of all Macintosh computers sold are found in the business marketplace and one-third of these are sold to large businesses.

In fact, the Macintosh is appearing on a growing number of approved vendor lists in companies such as Eastman Kodak, Honeywell, Motorola, Seafirst National Bank, Arthur Young, Boeing, GTE, Peat Marwick Mitchell, DuPont, and Hughes Aircraft.

In markets like desktop publishing, graphics design, and the technical office, the Macintosh has clearly become a viable workstation in major Fortune 1000 corporations.

Sales of the Macintosh computer into the business market is expected to accelerate over the next few years. For example, research indicates healthy growth in the Fortune 500 market segment. In fact, in a survey of 61 Fortune 500 companies conducted by Kidder Peabody, 30 percent of the firms said they expected to buy Macintosh computers over the next two years.

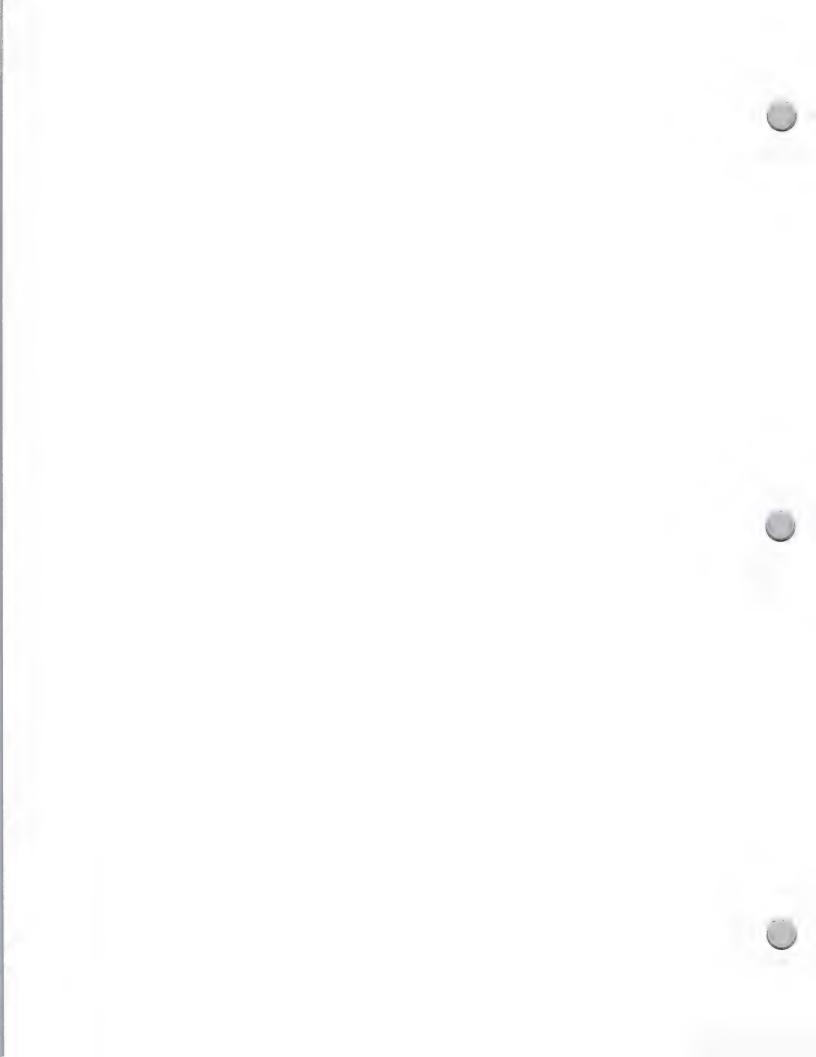
Why Businesses are Buying Macintosh

Ease of Learning Reduces Training
 Many companies are embracing the Macintosh because its intuitive, consistent interface greatly
 reduces training costs. One study showed it reduced training costs by a factor of eight over
 MS-DOS-based machines.

Service companies, in particular, reap an advantage from this Macintosh ease of learning, because such businesses often have large numbers of employees who are not computer literate. To date, 51 percent of business Macintosh computers have been sold to service industries.

• Communications and Power

The ability for computers to communicate with each other is also extremely important in the business market. Linking the Macintosh via its built-in AppleTalk® connection to MS-DOS computers, to other networks and to mainframes and minicomputers extends the power and transparency of the Macintosh to the business workgroup.





Business Market Research

Market Research October 1, 1988

"Big Eight" accounting firm Arthur Young, for example, uses thousands of Macintosh computers as field systems for its audit department. NYNEX Enterprises, part of the New York-based regional telephone company, uses Macintosh almost exclusively for its office automation tasks.

Graphics Orientation

Desktop publishing, a strong application area, has done much to establish the Macintosh as an important business tool. According to internal sources, 40 percent of all desktop publishing users use their Macintoshes with lay-out design products to create magazines, fliers, newsletters, and the like. Another 20 percent use their Macintoshes for artwork, illustrations or graphic designs. In addition, 30 percent do document processing, ranging from letters and reports to proposals and technical manuals. Of the remaining usage, desktop publishing users are taking advantage of is the creation of presentation materials, such as overhead transparencies and slides.

More than 70 percent of large and medium-size newspapers in the United States use a Macintosh to help produce their editorial art. Applications range from one-column locator maps and data graphs to sophisticated explanatory diagrams, full-color weather maps, and special typographic effects. Gannett Company, Inc., publisher of *USA Today*, uses Macintosh computers throughout its newspaper chain.

And a wide range of large companies such as Federal Express to small graphic design firms like PageLab have benefited from the numerous available desktop publishing solutions.

Macintosh Business Configuration

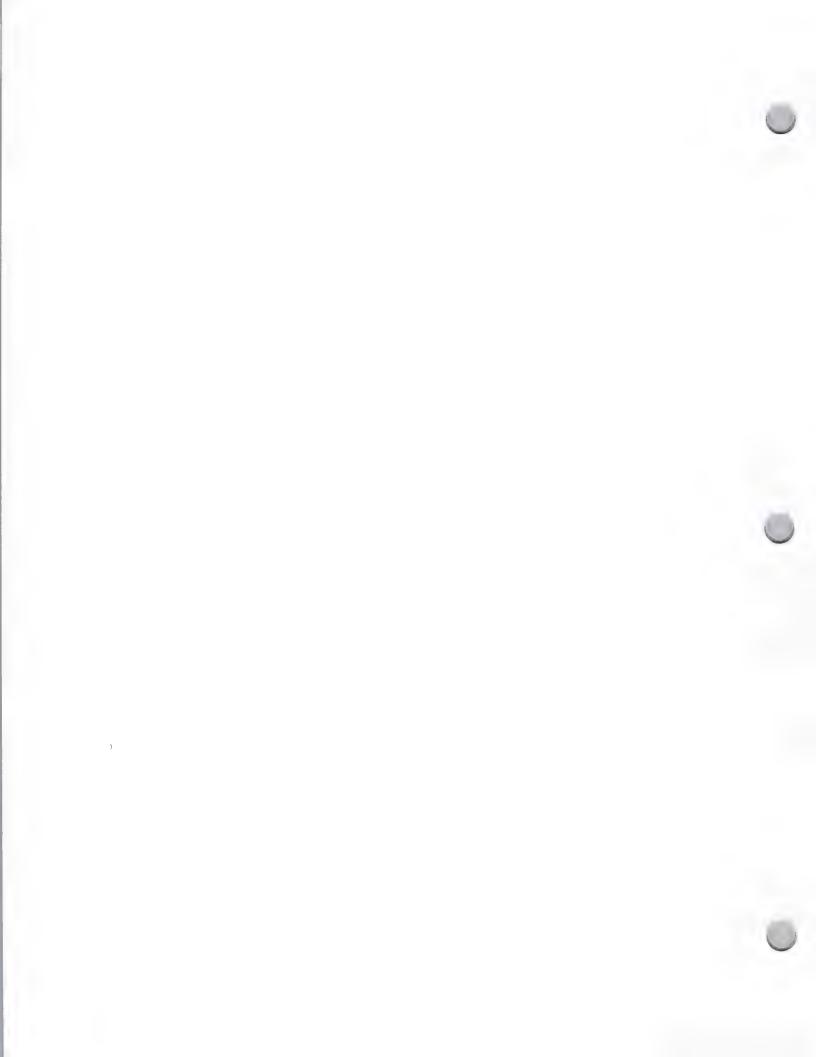
Peripherals add to the effectiveness and usefulness of Macintosh and enhance productivity in businesses of any size. Internal market research indicates that 87 percent of businesses who use Macintosh use printers; 53 percent use external floppy disk drives; 50 percent use hard disk drives; and 19 percent use modems.

Computers in Small Business

Apple is currently putting considerable effort into penetrating the small business market with Macintosh. Apple defines a small business as any company that has 50 or less employees. The small business segment employs almost 66 percent of the country's white-collar work force and represents a relatively untapped market for computers. Currently less than 20 percent of these small businesses use computers.

Some of the small business market segments that represent good opportunities for Macintosh are advertising, public relations, consulting, law firms, real estate office, investment services, engineering firms and medical practices.

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Market Research October 1, 1988

Apple has sold over 500,000 Macintosh™ personal computers in higher education since the system's introduction in 1984. This number includes sales to both institutions and individuals (faculty, staff and students).

Demographics

The higher education market is a large one, including approximately 12.5 million college students in over 3,000 institutions. In addition, there are more than 750,000 faculty and administrators, and there are 2.5 million new students each year.

Selecting Computers

College students typically purchase a computer with their own money, have access to computers in college labs, or receive a personal computer as a gift. The best selling Macintosh in higher education is the Macintosh SE with a large percentage of SE HD20's.

Faculty and administrators are more likely to purchase a computer with grants or their own money.

The primary reasons cited by students, faculty, and administrators for choosing a particular computer are price, ease of use, and word-processing capability. Studies show that 80 percent of computer use across the spectrum of schools is for word processing, although students in different discipline areas have uses for various different kinds of general-purpose and specialized applications, such as spreadsheets, databases, and graphics.

Purchasing a Computer

Students purchase their Macintosh computers both through on-campus bookstores who act as resellers, and retail dealers. Generally, the school administration negotiates with a hardware vendor and then receives a discount based on volume purchase. Apple sells computers directly to 450 accounts. The remaining schools are serviced through our dealer channel.

The higher education market has purchasing cycles that reflect both the textbook market and the academic year. Institutions tend to purchase equipment for academic use during the late spring and summer months. Students tend to purchase during back-to-school and holiday seasons.

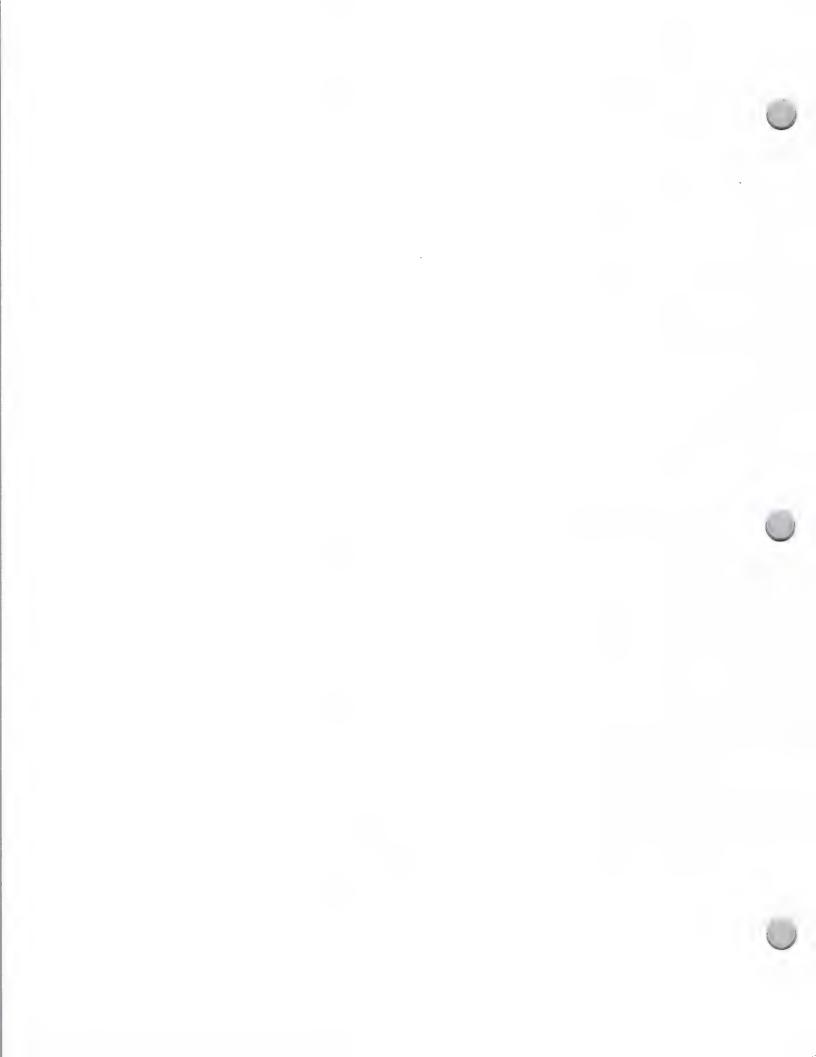
A typical Macintosh configuration for both faculty and students includes a dot matrix printer and two floppy-disk drives. Close to one half of the Macintosh computer owners have a hard-disk drive. Among Macintosh users 1 megabyte of memory is the standard, with 2-4 megabytes becoming increasingly common.

Higher Education Market Trends

The higher education market is still growing at a rapid pace. At the end of 1987, about 27% of all students own a computer. Many other students have access to personal computers in labs or dormitories. The student market is expected to grow by 25 percent over the next two years.

The penetration rate among faculty and administrators is close to 46 percent. This market is also expected to continue to grow, but not as quickly as the student market.

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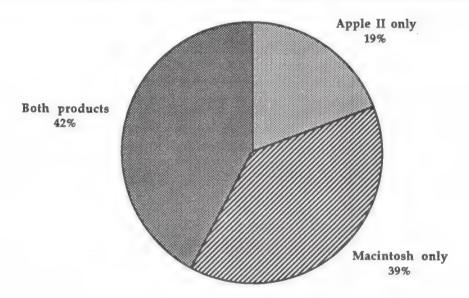
User Group Profile

Market Research May 1, 1988

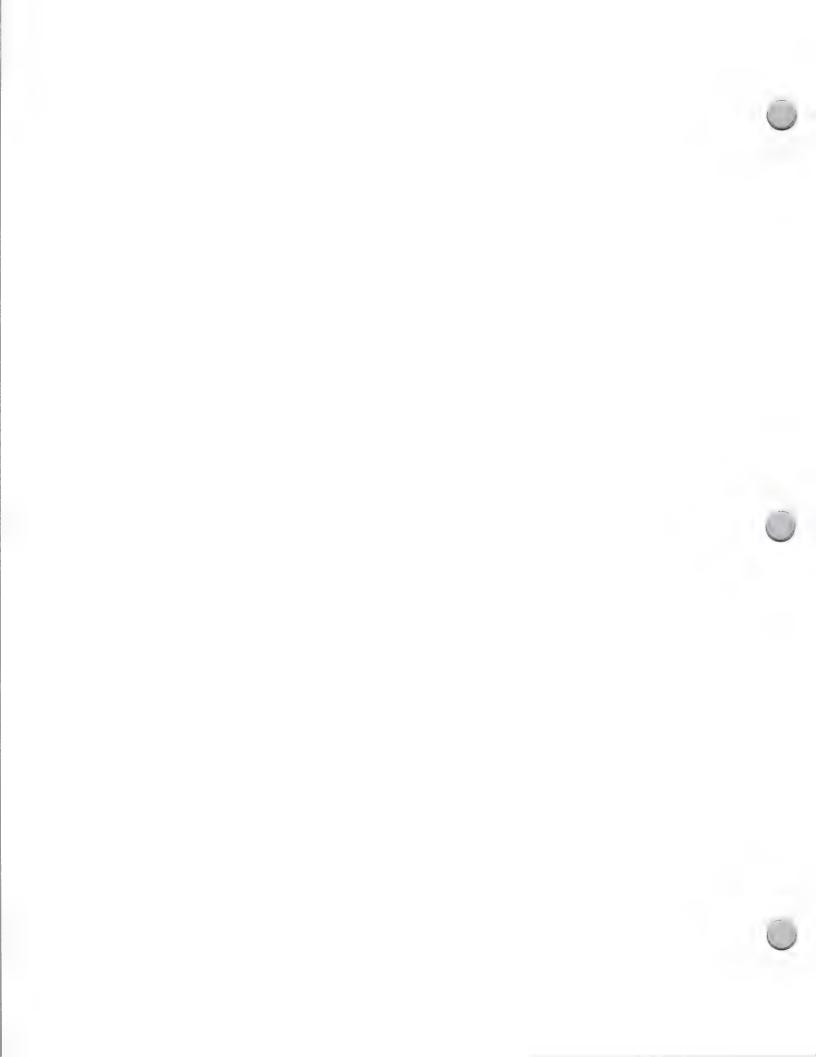
Through a program called the Apple User Group Connection, Apple maintains ongoing contact with nearly 1,000 user groups across the country. Although most of these groups are the traditional, community-oriented associations offering support to a wide variety of users, an emerging minority of Apple User Groups focus on a specific business, application, educational institution, or government agency.

Since its establishment in November 1985, Apple's User Group Connection has worked to build a direct link between these groups, Apple's corporate and field offices, the authorized dealer network, and the developer community. The seven-person Connection team maintains an ongoing exchange of information between Apple and these groups, with special emphasis on market-specific opportunities. The following information profiles Apple User Groups.

First, Apple User Groups are on the rise. Their number has grown significantly—up 19 percent (813 to 965) in one year. The biggest growth has been in the Macintosh® computer area—largely due to the expansion of business and government groups—but groups looking only at the Apple® II or at both product families are also on the rise. Today, the breakpercentage looks like this:



The majority of our groups—623 out of 965—are community-based. This number has remained relatively constant over last year, though membership in 73 percent of these groups is on the rise. Growth in market-specific areas is dramatic, as the following chart shows.

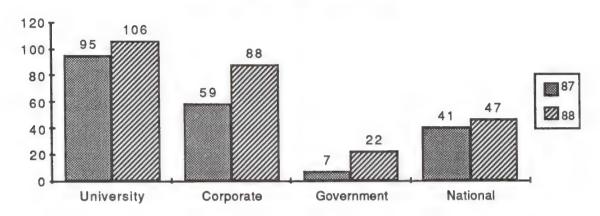




User Group Profile

Market Research May 1, 1988

User Group Growth by Market Focus April 1987 through March 1988



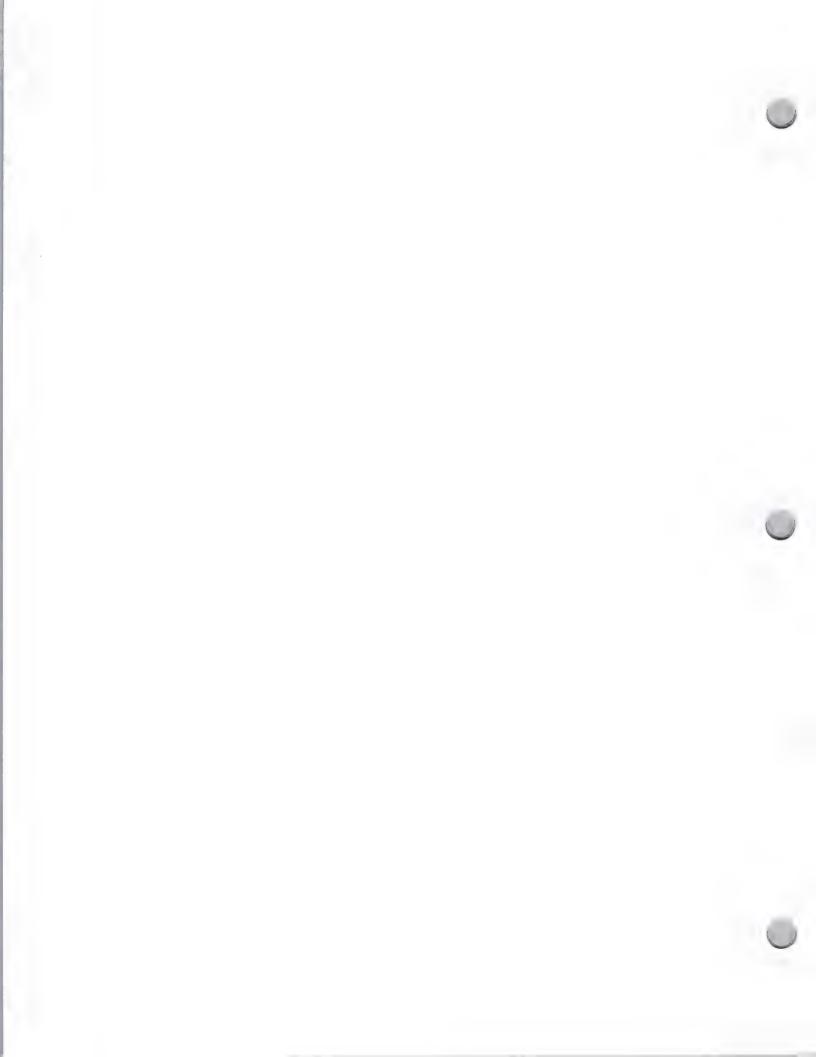
In these segments, the number of groups increased by 11 percent, 33 percent, 33 percent, and 15 percent respectively.

Apple facilitates developer/user group interaction through a discussion area on the AppleLink® information service. Through the user group Bulletin Board System (BBS) available to all developers who use AppleLink, developers and user-group contacts can exchange insights on products or technical issues, schedule speaking engagements, provide product or marketing feedback, and otherwise build a rapport. To find this bulletin board area, scroll down on your AppleLink screen and double-click on the User Groups icon.

Developers wishing to send information to Apple User Groups are encouraged to contact Developer Programs to obtain a set of Apple User Group mailing labels. This allows direct contact with either the entire community or a subset.

For more information on Apple's User Group Connection, contact:

The Apple User Group Connection Apple Computer, Inc. 20525 Mariani Avenue Cupertino, CA 95014 AppleLink: USER.GROUPS





APDA

Distribution October 1, 1988

If you are a programmer or developer of software or hardware compatible with Apple® products, and you need fast access to the latest Apple and third-party technical information and development tools, the Apple Programmers and Developers Association (APDA) is for you.

APDA provides a one-stop, convenient source of up-to-date information and tools that are essential for programmers and developers. APDA is administered by the A.P.P.L.E. Co-op, one of the first and largest Apple user groups in the country. Access to Apple's non-retail technical development products, including tools, languages, and technical reference manuals is limited to APDA members.

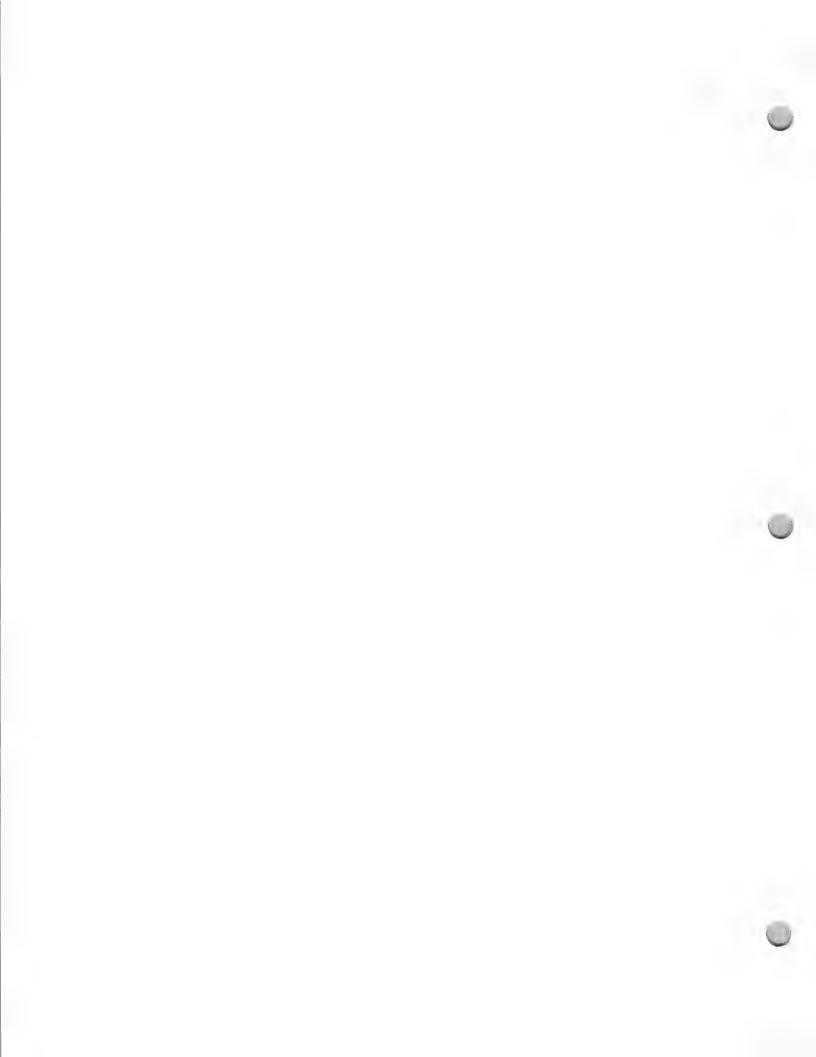
APDA members are entitled to the following benefits:

- Quarterly product catalog/newsletter
- Access to Apple II and Macintosh® development tools, system software (U.S. and international), technical notes, and manuals for development of U.S. and international products. Examples of products available only through APDA are MPWTM, MacApp®, APWTM, and Apple II and Macintosh Technical Notes
- Access to languages and development tools from a variety of third-party companies
- Access to technical books, such as advance and current versions of the Apple Technical Library, including <u>Inside Macintosh</u> and other reference materials

If you are interested in becoming a member (there is a small annual fee), or would like to order Apple-labeled and third-party development products, please contact:

APDA 290 SW 43rd Street Renton, WA 98055 (206) 251-6548 Applelink: APDA MCI: 312-7449

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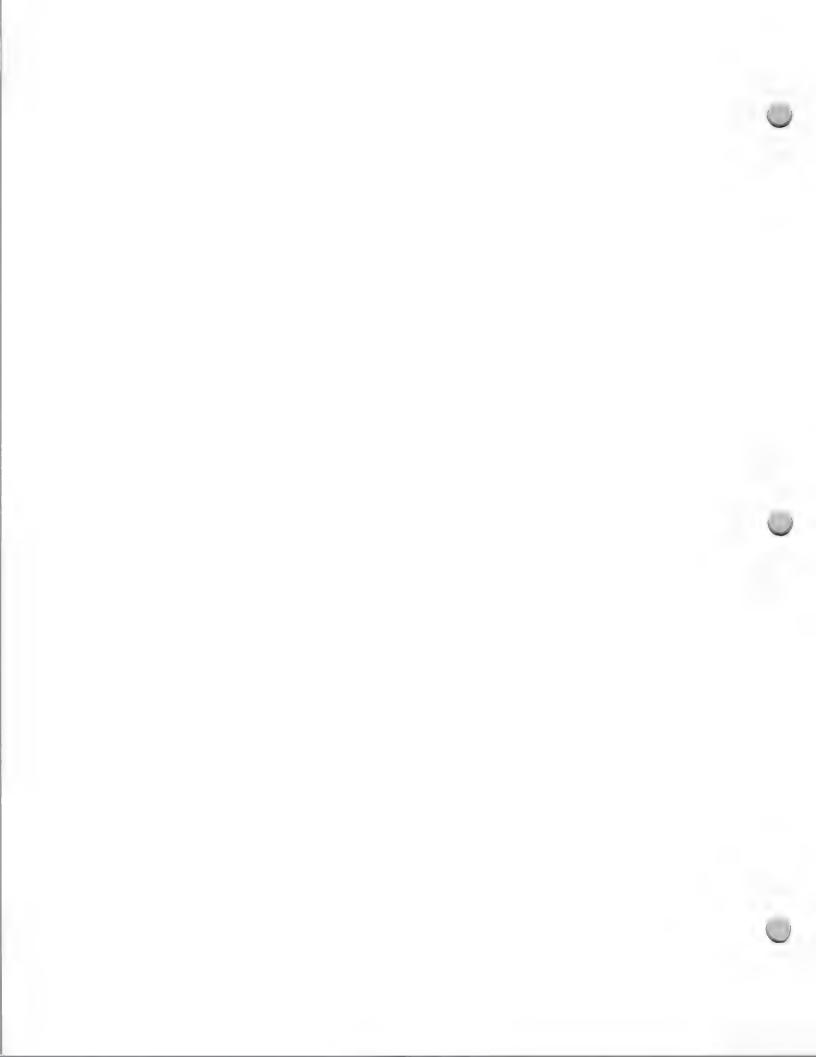


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October 1, 1988

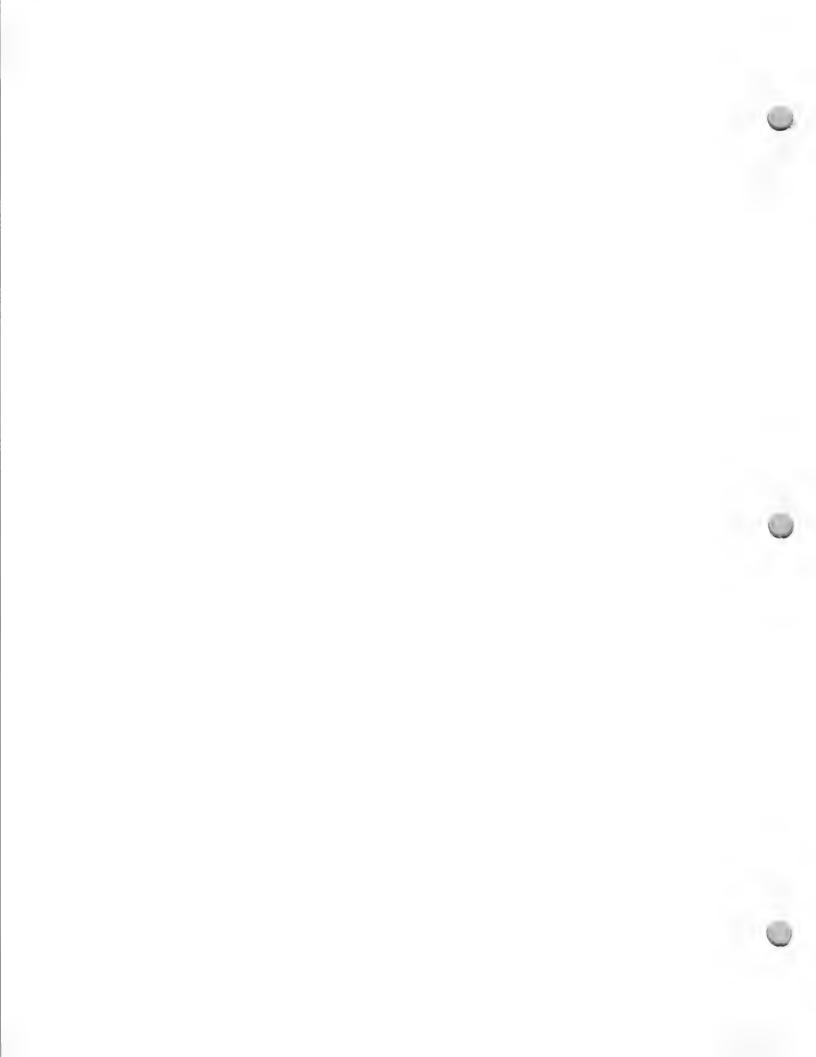
The following distributors are interested in distributing Apple compatible software and/or hardware. Apple Computer, Inc. provides this list for informational purposes only. Please note that this is not a comprehensive list, and does not constitute an endorsement or recommendation from Apple Computer, Inc. If you would like to add distributors to this list, please contact Peggy Jensen at (408) 973-4897 or link her at JENSEN.P.

Name	Product	Contact
ABCO Distributors 300 Tallpines Industrial Park, Rt. #59 Monsey, NY 10952	Apple [®] II & Macintosh™	Bernie Slone (914) 368-1930
Advanced Products Group 1009 Mansell Rd. #K Roswell, GA 30076	Macintosh	Grant Davis (406) 642-1801 (800) 762-3477
Alpha Systems Distribution, Inc. 4650 Arrow Highway, #A-3 Montclair, CA 91763	Apple II & Macintosh	Laurent R. Martres (714) 626-4070
Beamscope 110 Commander Blvd. Scarborough, Ontario M1S 3H7 Canada	Apple II & Macintosh	Wayne Parkes (416) 291-0000
Bodisco 5619 North Blackstone Avenue Fresno, CA 93710	Apple II & Macintosh	Harry Perkins (209) 432-0955
Bonsu Distributors 1360 Bordeaux Drive Sunnyvale, CA 94089	Macintosh	Mary Huberneth (408) 747-4400
Computer Marketing Group 135 Fort Lee Road Leonia, NJ 07605	Macintosh	Jackie Kirsch (201) 947-3551
Computer Software Services 495-A Busso Road Elk Grove Village, IL 60007	Apple II & Macintosh	Barry Fadert 800-422-4912
Federal Electronics 14407 Alondra Blvd. La Mirada, CA 90638	Apple II & Macintosh	Charlie Wilson (213) 587-5071



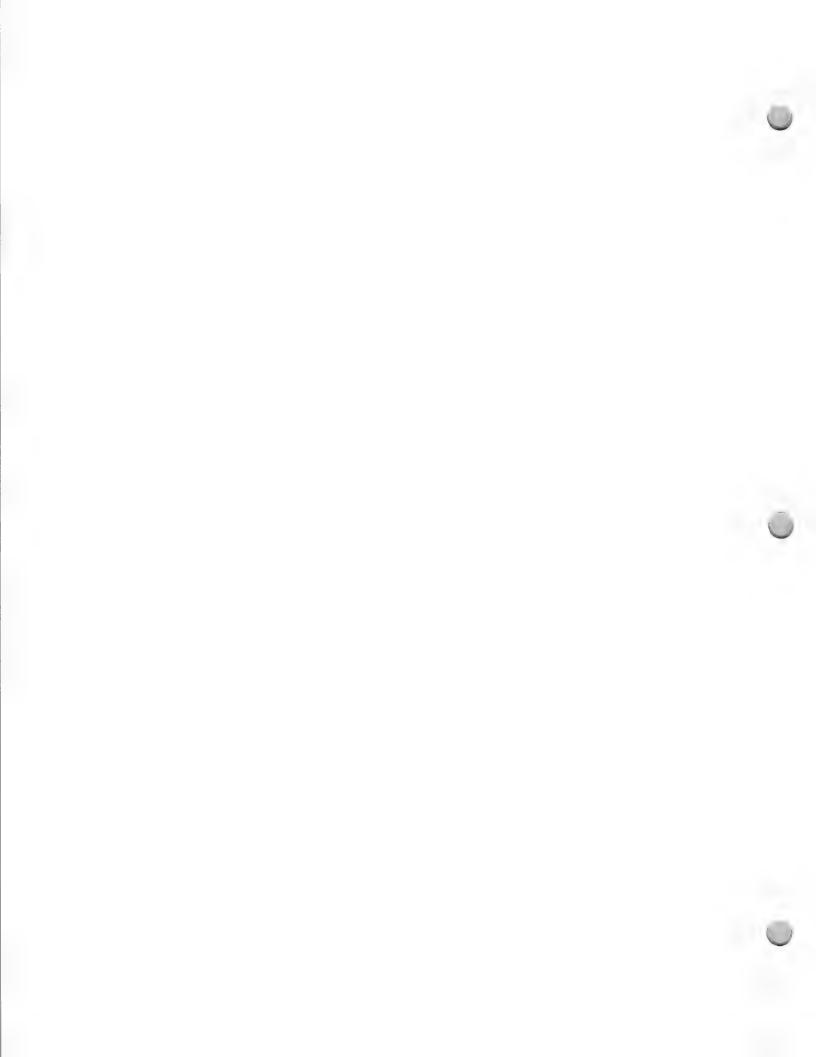


Distribution		October 1, 1988
Name	Product	Contact
Frantek Computer Product, Inc. 1645 Russell Road, Unit 2 Ottawa, Ontario K1G 4G5 Canada	Apple II & Macintosh	Georgo Noaro (613) 523-7272
1stDESK Systems, Inc. 7 Industrial Park Road Medway, MA 02053	Macintosh	Bill Hulbig (617) 533-2203
Gates Distributing, Inc. 5221 Central Avenue Richmond, CA 94804	Apple II & Macintosh	Jay Stewart (415) 526-4444
G&R Distributing 1495 Busch Parkway Buffalo Grove, IL 60015	Macintosh	Craig Hansen (312) 537-8777
Handleman Co. 500 Kirts Blvd. Troy, MI 48084	Apple II & Macintosh	Mike Negrin Howard Kowalski (313) 362-4400
Ingram Software 2128 Elmwood Avenue Buffalo, NY 14207	Apple II & Macintosh	Joe McAdams (716) 874-1874
Ingram Software 141 Adesso Drive Concord, Ontario L4K 2W7 Canada	Apple II & Macintosh	Patrick Finkel (416) 738-1700
Intelligent Products 2238 Camino Ramon San Ramon, CA 94583	Macintosh	Wayne Lacasse (415) 866-8620
Lieberman Enterprises 9549 Pinn Avenue South Bloomington, MN 55431	Apple II & Macintosh	Dave Rech (612) 887-5359
MacConnection 14 Mill Street Marlow, NH 03456	Apple II	David Beffa-Negrini (603) 446-7711





Distribution		October 1, 1988
Name	Product	Contact
MacKenzie Brown Ltd. 267 Richmond Street West Toronto, Ontario M5V 1W9 Canada	Apple II & Macintosh	Jack Brown Dan MacKenzie (416) 593-6880
Micro-D 2801 South Wale Street Santa Ana, CA 92704	Apple II & Macintosh	Sue Harvey (714) 540-4781, X 2712
MicroGraphics, Inc. 2210-A West Braker Ln. Austin, TX 78758	Macintosh	Dan Frey (512) 834-0673
Microtek, Inc. 11878 Market Street Livonia, MI 48150	Macintosh	William A. Fedak (313) 464-2111
M&M Representatives, Inc. 1243 Hanley Industrial Ct. Brentwood, MO 63144	Macintosh	Dan Miller (314) 968-4070
Navarre Corporation 7300 32nd Avenue North Crystal, MN 55427	Apple II & Macintosh	Chuck Whitaker (612) 535-8333
PC Micro Dealers 3042 Remington Avenue Baltimore, MD 21211	Apple II & Macintosh	Jay Johnstone (301) 889-1000
Sales Marketing Associates 923 East Broad Street Columbus, OH 43205	Macintosh	Ed Lehnert Doug Smiton (614) 253-2555
Softcode Dist. & Consultants Ltd. 3555 14th Avenue, Unit 7 Markham, Ontario L3R 2L6 Canada	Macintosh	Julian Lee (416) 477-5474
Softkat 16130 Stagg Street Van Nuys, CA 91406	Apple II & Macintosh	Karen Miller (818) 781-5280





Distribution October 1, 1988 Name **Product** Contact Softsel Computer Products Apple II & Macintosh Alan Schroeder 546 North Oak St./P.O. Box 6080 (213) 412-1700 X216 Inglewood, CA 90312 Triangle Electronics Apple II & Macintosh Chuck Newberg 6580 Frankstown Avenue (412) 441-9659 Pittsburgh, PA 15206

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Kinko's ACE

Distribution May 1, 1988

Kinko's Academic Courseware Exchange (ACE) allows higher education developers to distribute their precommercial software for the Apple® Macintosh™ and Apple II computers. The Academic Courseware Exchange provides access to the ever-expanding reservoir of specialized courseware developed at higher education institutions by students, faculty, and staff.

Overview

Kinko's, headquartered in Santa Barbara, publishes the *Academic Courseware Exchange Catalog*. This catalog lists all ACE products and appears two times a year. Catalogs are distributed by mail to requestors who call Kinko's toll-free number and through Kinko's network of 320 stores nationwide. Courseware may be ordered by departments, or faculty and other individuals.

Types of Courseware

Courseware in the catalog is generally priced between \$8 and \$40—comparable to the cost of higher education textbooks with site licenses available on many packages. The current spring 88 catalog features over 150 software packages. Prices are kept low, both because products are generally precommercial and to discourage unauthorized copying. A copyright notice is included advising users that it is illegal to copy software. To minimize production costs, software distributed through the Exchange is not copy protected.

The library of courseware in the Academic Courseware Exchange consists of both copyrighted and public-domain software in the following categories:

• Templates—Files linked to a particular software application. For example, a developer might provide spreadsheet templates for chemistry computations or MacPaint™ artwork for use in biology lab reports.

• Applications—Self-running, interactive programs such as a statistics processor, or an historical simulation.

 Tools—Multipurpose programs such as authoring systems, programming languages, or debugging tools designed to create new applications or lessons.

Kinko's Courseware Services

Through the Academic Courseware Exchange, Kinko's provides the following services to participating higher education developers.

Software and documentation production and packaging.

· Processing and distribution.

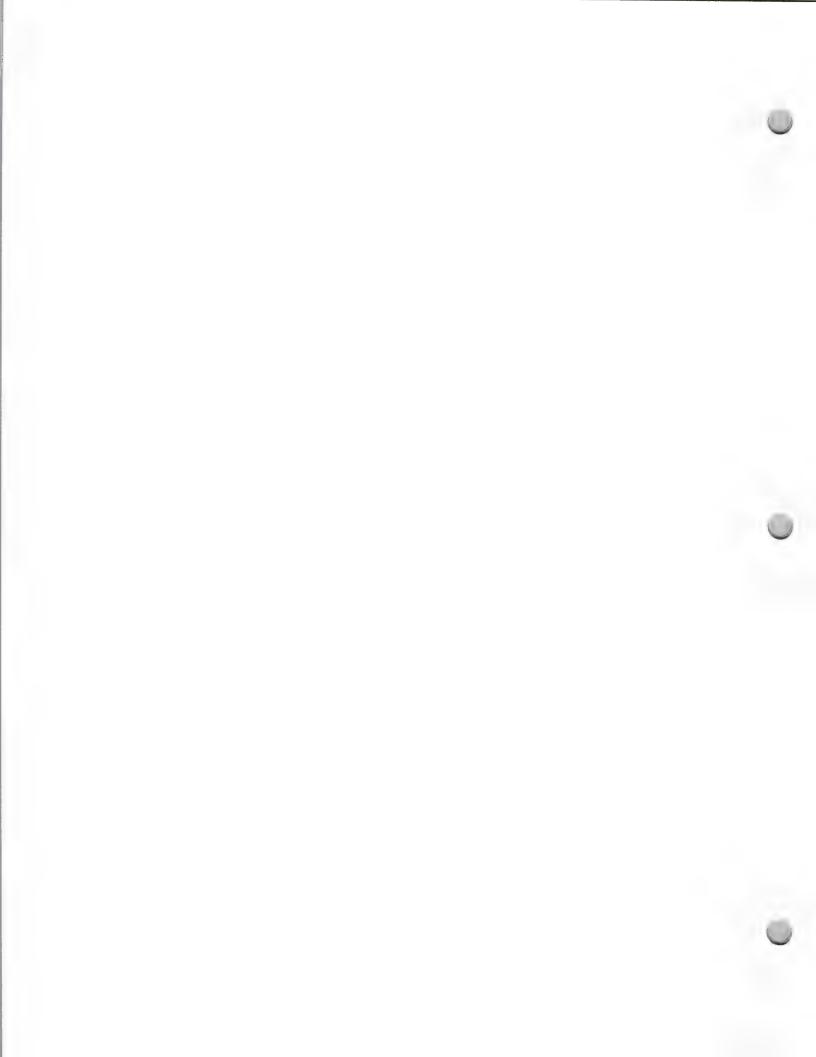
• Marketing services such as advertising, catalog publication, and distribution and direct mailing of flyers explaining the program to faculty.

Payment of royalties twice a year.

Feedback from users who call for support.

Administration of site licenses (at request of developer)

If you have any questions, would like to be included on Kinko's mailing list, or would like to include your product information in this catalog, please call Keith Lawrenz, the Academic Courseware Exchange Director, toll-free at 800-235-6919, or in California at 800-292-6640. You can also contact Keith by mail at the address which follows:





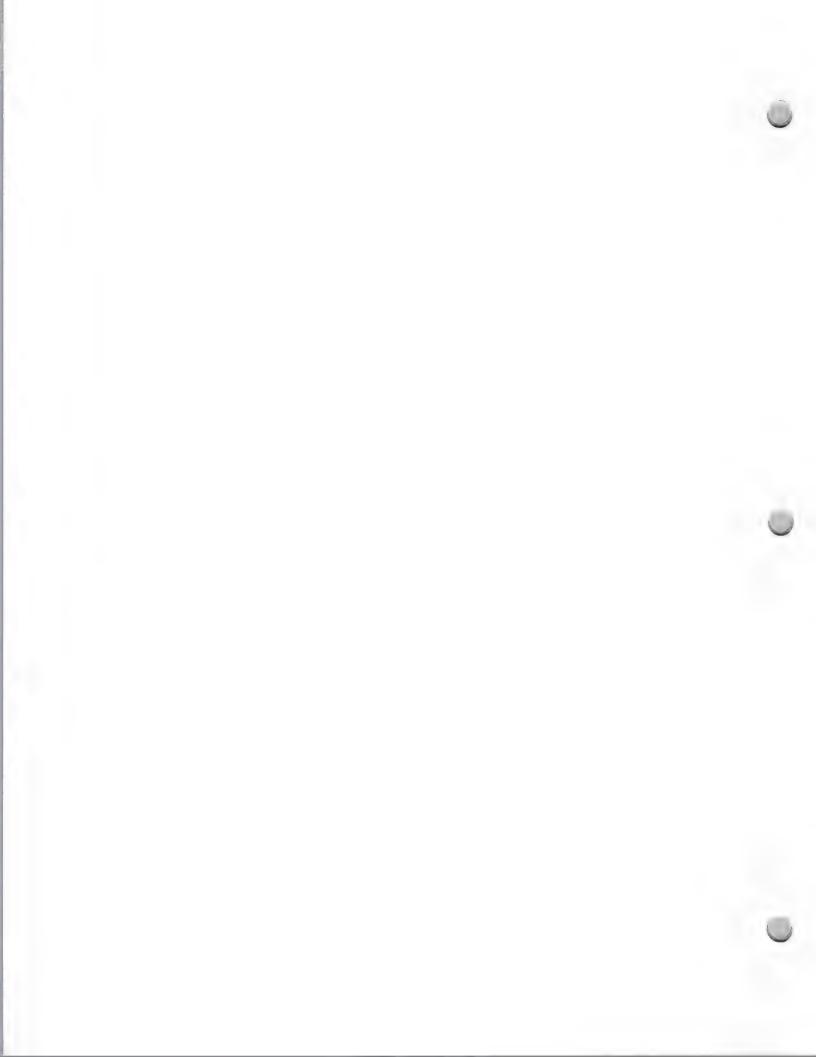
Kinko's ACE

Distribution

May 1, 1988

Kinko's Academic Courseware 4141 State Street Santa Barbara, CA 93110 Attn: Keith Lawrenz

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Languages and Tools

Distribution

February 1, 1988

If you develop or publish development languages, tools, and/or utilities for Apple® II or MacintoshTM computers, the following information may be useful to you.

The Developer Tools group at Apple Computer compiles and publishes a catalog called *Apple II and Macintosh Development Software; a Guide to Languages and Tools*. This catalog contains product information on Apple and third-party Apple-compatible languages, utilities, and tools. Its purpose is twofold: it offers you an opportunity to get exposure for products in an Apple catalog, and it lets other developers know what their options are.

Marketing Outlet for Developers and Publishers

A new and current catalog is now available. If you are interested in having your product included in the next issue, or if you have updates to a current product already listed, please contact Colleen Lavery at Apple. Her phone number is (408) 973-6525.

Participation in the catalog project is easy, and there is no fee. Colleen will send you a form to fill out that will ask you for basic information to be included in the catalog (contact, product description, price, and so on). To order your product, customers will call you directly.

To order this product catalog, you need to be a member of APDA. If you need additional information on APDA, refer to the ADPA information in this section. The catalog is free, with the exception of shipping charges, which you must pay. Currently, it lists over 200 products.

Apple distributes the catalog to APDA, Certified Developers, Higher Education, VAR, National Account customers, and Apple's International offices.

If you need additional information, please contact Colleen Lavery at:

Apple Computer
20525 Mariani Avenue, M/S 27S
Cupertino, CA 95014
Attn: Apple II and Macintosh Development Software
(408) 973-6525

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Wheels for the Mind

Distribution

February 1, 1988

Wheels for the Mind is an Apple Higher Education publication prepared in collaboration with Boston College. This quarterly journal is written by academic Macintosh™ users. It is compiled and edited by Peter Olivieri of Boston College and Monica Sabo of Apple Computer, Inc.

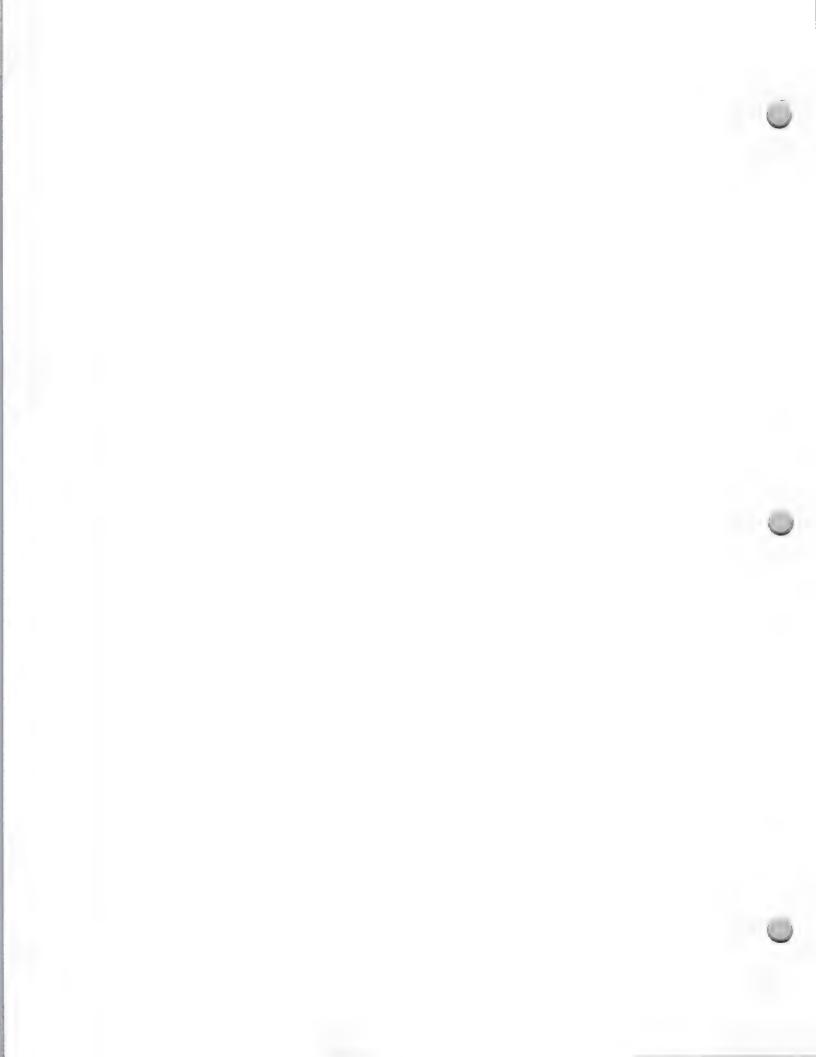
If you would like to have your article, project status report, or other submissions relevant to the higher education community considered for inclusion in *Wheels for the Mind*, please send your information—preferably as a MacWrite file on disk and accompanied by graphic illustrations screen dumps when applicable—to:

Peter Olivieri
OLIVIERI@BCVAX3
Wheels for the Mind
Boston College
Computer Sciences F430
Chestnut Hill, MA 02167

or

Apple Computer, Inc. 20525 Mariani Avenue, M/S 36L Cupertino, CA 95014 Attn: Monica Sabo Wheels for the Mind

Peter Olivieri will reserve the right to decide what will be published and what will not. To get a copy of the current *Wheels for the Mind*, write to Monica Sabo at the address above. Subscriptions are \$12 per year for four issues.





AppleTalk Development

Product Design and Support

May 1, 1988

Since its inception, the AppleTalk® Network System has provided a robust set of services for both end users and third-party developers. Those services are also remarkably elegant in the sense that they are easy to use, yet comprehensive in scope.

Over the past year, the AppleTalk Network System has undergone some dramatic enhancements, including the addition of Ethernet media support with the introduction of Apple's EtherTalkTM card and software, AppleShare® file server support for shared environments with the AppleTalk Filing Protocol (AFP), and the AppleTalk Data Stream Protocol (ADSP) for connection oriented applications. Each of these new products provides solutions for multiple markets, and offers third party developers new development tools. The purpose of this article, however, is not to describe these tools, but to point out the marketplace opportunities for products that utilize the AppleTalk Network System.

It's beginning to seem traditional to declare each new year the "Year of the LAN." This year, it is safe to say that end-user adoption of LAN systems is increasing. One reason is the growing number of applications that utilize LANs to promote shared access to data, expensive resources, or workgroup applications. It is in these areas that third party opportunities are greatest.

Market Considerations

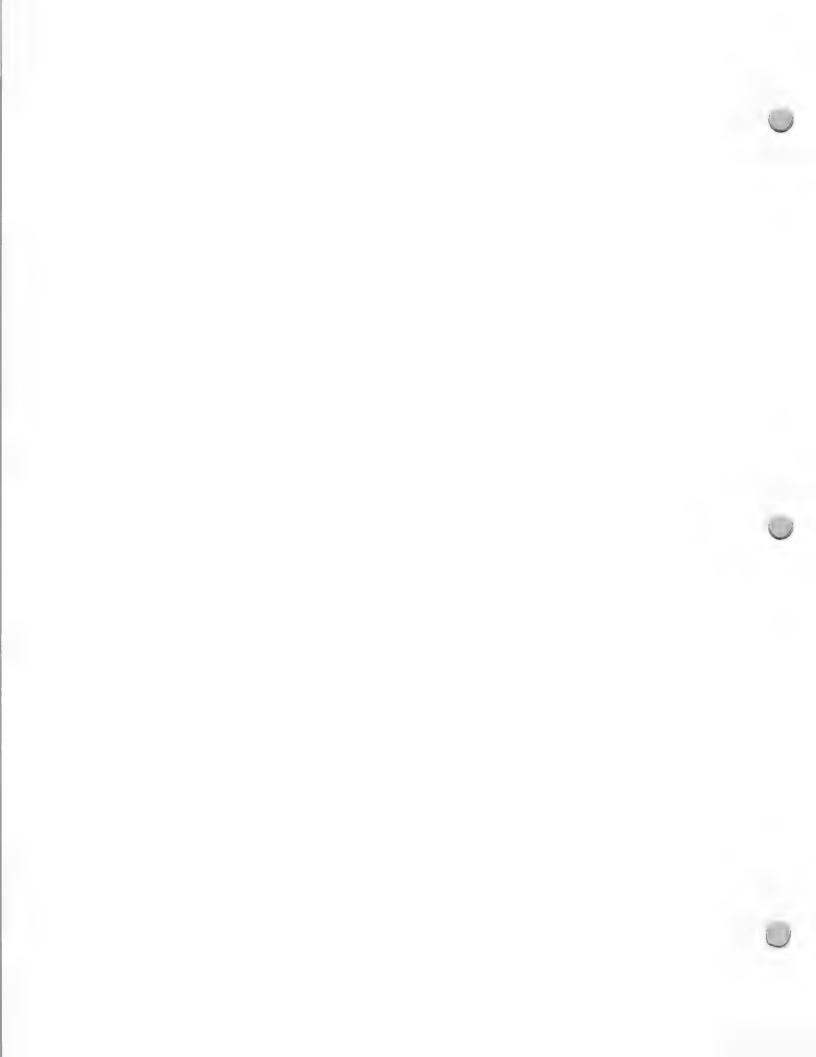
First, it is important to review the market before embarking on any development project. You should consider the following:

- Your proposed product's features, and how they differ from or improve upon the features of existing products
- The strengths and weaknesses of companies providing competitive products, and the resources that are available to counter the competition
- Marketing and distribution issues. As products become more system oriented, their sale becomes more complex. For example, with many networking products, the end user is not normally the buyer. Some distribution strategies may not appeal to a more sophisticated customer.
- Support. Products that require more than casual knowledge of networking and troubleshooting disciplines will require higher levels of support from within the developer's organization. Even great technology is hardly impressive when the customer's experience in trying to install and maintain the product is a nightmare.
- Documentation. This point is nearly identical to the support point raised above. The
 documentation must be accurate, concise, and useful. Having the technical writing team involved
 early and often in the project—even as part of the testing team—will help in producing good
 documentation.

System Configuration

Once your product idea is clearly defined, you need to determine the minimum Macintosh® configuration on which to run that application. It is recommended that your products run on the broadest possible range of machines. In Apple's case, that currently means being compatible with the following:

- · Macintosh Plus, Macintosh SE, and Macintosh II computers
- ADSP (AppleTalk Data Stream Protocol)





AppleTalk Development

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· AppleShare File Server software

EtherTalk cabling

AppleTalk Development

Depending upon the type of product that you intend to produce, development systems can range from the Macintosh Plus to the Macintosh SE to the Macintosh II. Because these Macintosh computers are also the systems of choice for today's business customers—as well as for customers in the higher education and government markets—you should take advantage of the additional features and performance that the newer Macintosh computers provide when designing new products.

AppleTalk Documentation

Development for the AppleTalk Network System requires current documentation and software. In addition to the most recent versions of the System and FinderTM, if you plan to produce a terminal-emulation product, the AppleTalk Data Stream Protocol and its release notes will be very useful.

Developing AppleTalk products that communicate with Digital's VAX™ systems would be assisted by licensing AppleTalk for VMS 2.0, which can be obtained through Apple's Software Licensing group. For general AppleTalk development, you will also want the *Inside Macintosh* books, *Inside AppleTalk*, *Applications Development in a Shared Environment*, and the AppleTalk Filing Protocol release notes—all of which are available through the Apple Programmer's and Developers Association (APDA™).

Development Opportunities

In specific terms, products that allow users to work effectively together, such as multiuser applications, will be successful in the years to come. There are excellent single-user word processing products that integrate well with single-user spreadsheets and page-layout programs. Extending the functionality of those solutions to include multiuser support is an example of the new generation of products that are possible with the services provided in the AppleTalk Network System.

Other applications that can utilize the AppleTalk Network System to advantage include multiuser calendars and schedules, and electronic-mail systems with connections to other mail systems. The latter could even involve connections between mail systems that are very different, such as a link from a mail system on an AppleTalk network and an IBM PROFS mail system running on a VMS[™] host over an SNA link.

Developers should not look to providing "me-too" connectivity products—network-level services with little differentiation from Apple's offerings. Instead, they should concentrate on the higher-level applications for which the returns are greatest, or on products positioned differently from those Apple supplies. Examples of such higher-level applications have been noted in the two preceding paragraphs. Use your imagination to think of new uses for networking and communications applications that build upon the AppleTalk Network System.

Evangelism Support





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Finally, work with Apple's Evangelism group as you progress through the product development cycle. This group can help you by discussing product opportunities and identifying potential development or distribution partners. These discussions are always confidential, even within Apple.

Apple welcomes suggestions from third parties on improvements to the AppleTalk Network System. The company periodically holds conferences that provide opportunities for face-to-face meetings with some of the key members of Apple's network system development team.

Evangelism can be reached at (408) 973-3289, or you may write to them at this address:

Evangelism Apple Computer 20525 Mariani Avenue, MS 51/AB Cupertino, CA 95014





AppleCD SC Development

Product Design and Support

October 1, 1988

Apple's introduction of the AppleCD SCTM in March opened up a large new area for development: information as a commodity. The space that a CD-ROM offers—more than 550 megabytes—allows you to store data in quantities never before possible. Mastering and replication costs are already quite reasonable, and they are dropping. Even more important, Apple's personal computers offer an ideal interface to these vast amounts of data. In addition, CD-ROM technology is an excellent tool to add value to the printed word, through use of sound and graphics.

This document gives an overview of the product and explains the resources and tools that are available for companies, schools, institutions, and individuals who want to create CD-ROMs for use with a Macintosh or Apple® II computer.

What Is the AppleCD SC?

The AppleCD SC is Apple's CD-ROM drive. It has about the same form factor as the Hard Disk 20SC, is front-loading, has a 64K RAM buffer to help you get improved data transfer rates, and can be used with both the Macintosh and the Apple II product lines, because it is a SCSI peripheral device. It will also work in a shared environment under AppleShare® File Server 2.0 software. With an AppleCD SC connected to a Macintosh or Apple II computer, a user has access to more than 550 megabytes of text, audio, graphics, and images on a single 12-centimeter CD-ROM disc—the equivalent of seven hundred 800K floppy disks or 270,000 pages of typewritten text.

The drive also contains a full audio chip set, so you can listen to audio CDs via the headphone jack in the front, or through amplified speakers attached to the RCA jacks in the back of the computer. A desk accessory called CD Remote comes with the drive and allows you to control the playback of your audio CDs.

Software: HFS and High Sierra/ISO

HFS

Included with the AppleCD SC is a disk containing an HFS driver to be installed in your system. This driver does not recognize other manufacturers' CD-ROM drives, it only recognizes the AppleCD SC drive. Installation of the driver causes the disc in the AppleCD SC to appear as an icon on the desktop; you manipulate it in much the same way as other storage devices.

High Sierra/ISO

Beginning in September, Apple's driver that supports ISO 9660/High Sierra will also be included on the disk that accompanies the AppleCD SC.

High Sierra was the proposed file format standard for CD-ROM technology, formulated back in 1986. The ISO adopted the High Sierra standard in February 1988, making some small changes. In the meantime, however, people had been pressing CD-ROMs using the proposed standard, so many discs already exist in the original High Sierra standard. *Apple supports both versions*. As with the HFS driver, the disc appears as an icon on the desktop.



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As a developer, you can choose the file format that's best for your product—HFS, ISO, or High Sierra—and be assured that your user won't have to know the difference.

Documentation/Software for CD-ROM Development

The following documents and disks will be helpful to you in your development efforts. Some can be obtained from Apple's Developer Programs group: call the Developer Programs Hotline at (408) 973-4897, and ask for the AppleCD SC Development package. Others can be ordered from the Apple Programmer's and Developer's Association (APDATM).

Included in the AppleCD SC Development package are:

Audio Interchange File Format Specification

Macintosh File Format and Picture Structure for Graphic Applications

• Apple CD-ROM Development Resource guide

- Technical Notes about the DeskTop Manager, ISO 9660 Extensions, "What is wrong with my High-Sierra disc?"
- The Apple Starter Offer for CD-ROM Disc Mastering (see further)

What you should order from APDA:

- AppleCD SC Developer's Guide APDA draft
- Stack Design Guidelines APDA draft

You will also want to get from your dealer HyperCard® 1.2.1 (if you haven't yet) and HyperCard related publications. We also recommend that you read the following documents, which are available from APDA or at your bookstore:

- Apple Human Interface Guidelines
- Inside Macintosh

A unique service for first time CD-ROM developers: The Apple Starter Offer for CD-ROM Disc Mastering

In order to encourage and stimulate CD-ROM development, Apple is making a Starter Offer available. The idea behind the offer is to allow developers to experiment with putting a (relatively) small amount of data on a CD-ROM. This is how it works:

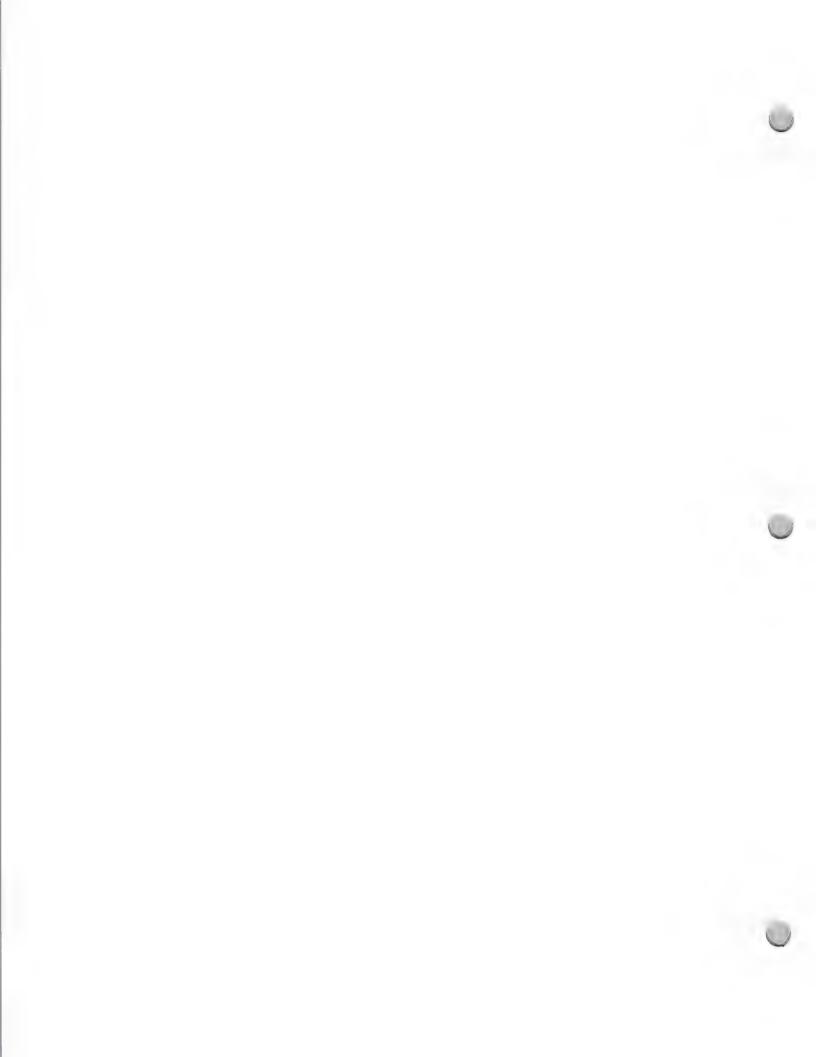
1. Arrange your data on an 80-megabyte hard disk.

2. Manipulate the data until you like the way it performs with the software that's accessing it, e.g. with HyperCard stacks.

3. Send the hard disk off to a mastering facility.

4. Get back CD-ROMs that contain an image copy of your data.

Apple has been working with mastering facilities to qualify them as vendors for this kind of service. The assumption is that after completion of a successful test CD-ROM, you will want to progress to more sophisticated methods of data preparation more suitable to a full 550-plus megabytes of data.





AppleCD SC Development

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However, creating a test disc of 80 megabytes or less will allow you to:

- · Offer your technical staff the experience needed to gain expertise
- Test the performance and usability of your product
- Create a demonstration for clients and colleagues
- Estimate the time and resources needed to complete the whole project

The Starter Offer consists of a very attractive set of services at a very advantageous price. Four mastering facilities are participating in this program. They agree to provide an *exact image copy* of your 80MB hard disk, to replicate 100 copies of the CD-ROM disc, in a 10-day maximum turnaround period, for \$1500. This is a unique opportunity for you to experiment and see how great CD-ROM technology can be for you. All details are provided in the Apple Developer Programs' AppleCD SC Development package.

Because of the promotional and experimental nature of the starter kit, we are limiting this offer to one per customer. If you want to conduct further experiments, we suggest that you deal directly with the mastering facility to negotiate for services.

Recommended Development System Configuration

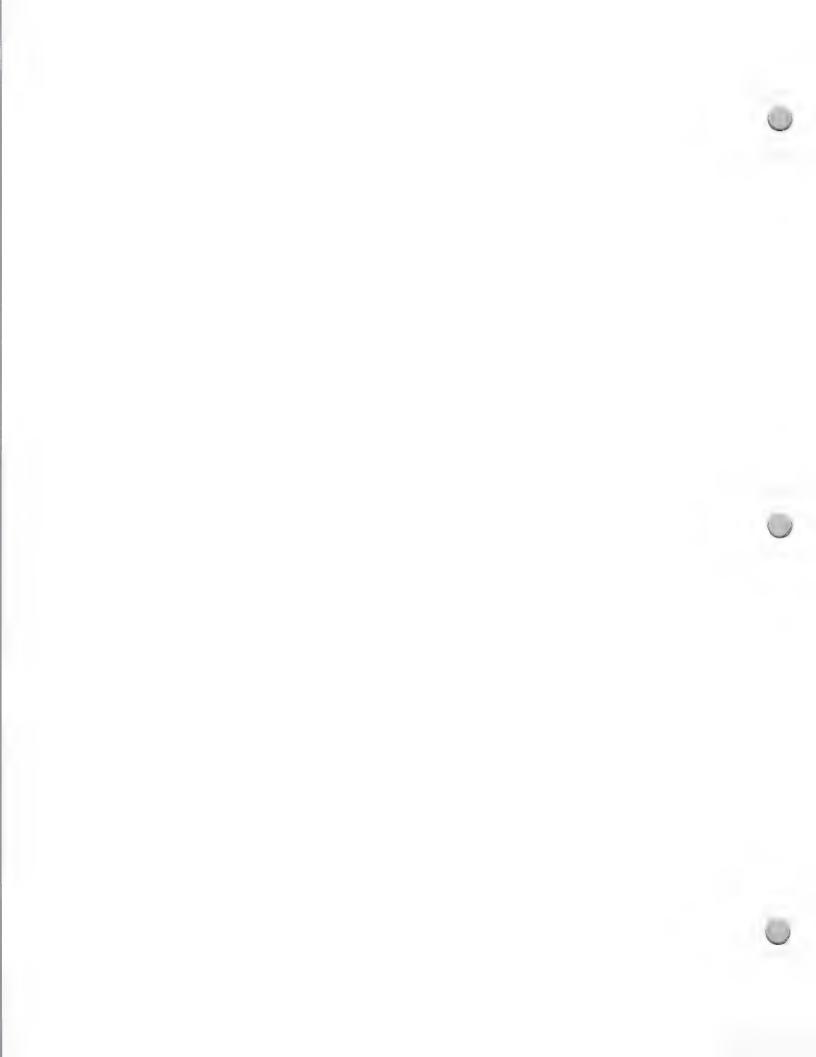
- AppleCD SC
- Macintosh II w/ 40-megabyte internal hard disk
- Keyboard
- Memory for expansion to 5 megabytes
- Color monitor
- Video card
- External Hard Disk 80SC w/cable

AppleCD SC and HyperCard®

Just as CD-ROM is an ideal method to distribute vast amounts of diverse data, HyperCard is an excellent way to organize and distribute this information.

Perhaps the single most interesting advantage HyperCard offers you as a developer is the opportunity to present users with a consistent interface-something currently lacking in the CD-ROM world. And, because HyperCard is included with all Macintosh computers, it's an interface familiar and available to a large customer base.

There are already a number of CD-ROM developers doing some interesting things with HyperCard as it is flexible and extendible to suit a variety of users. For example, some developers have added value to current retrieval engines by using and extending HyperCard to complement the best elements of their existing engine. Further information regarding the HyperCard-CD-ROM relationship can be found in the AppleCD SC Developer's Guide.



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Working with Evangelism

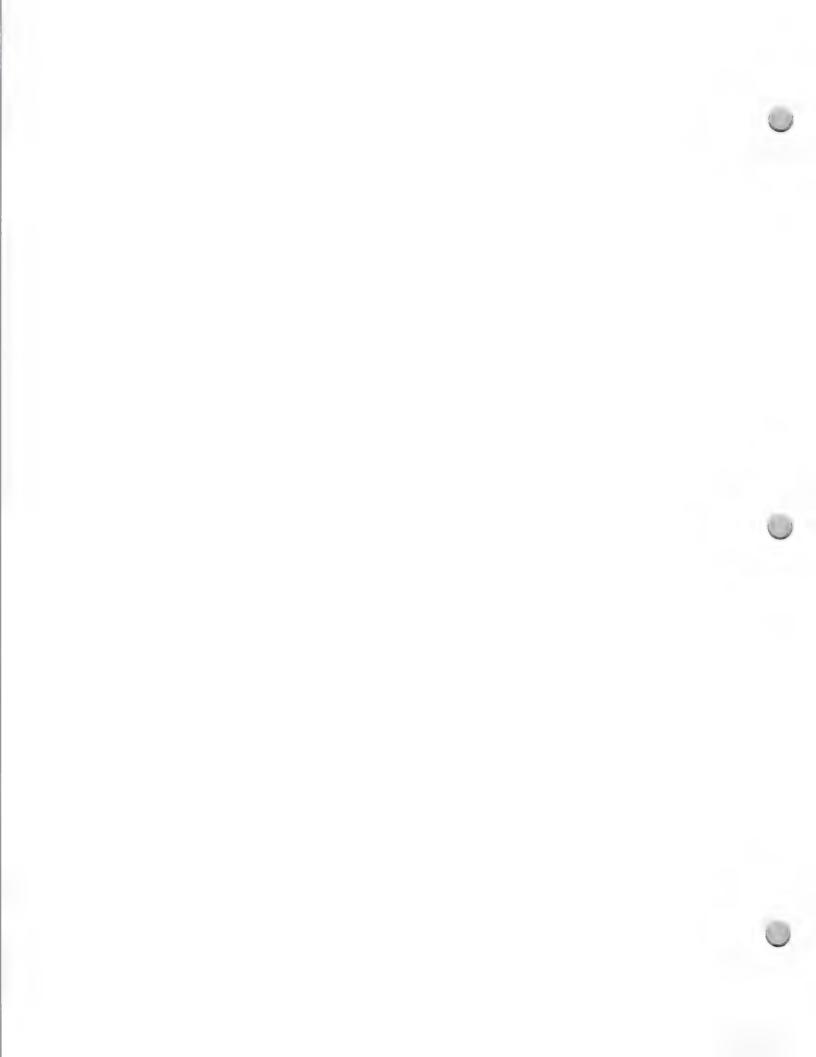
In all cases, we want to know your CD-ROM product plans so that we can support you from both a developmental and a promotional point of view.

We want you to fully exploit the capabilities of the easy-to-use desktop interface, and to create a product that is superior to those that run on other CPUs. We hope that you will avoid straight "ports" of existing MS-DOS products, or parallel development efforts that encourage feature compromises to allow for the shortcomings of other CPUs. We believe that Apple customers bought their computers for a reason—ease of use—and that you must fulfill this expectation, or your product won't be successful.

When you're ready, we'd like to see a demonstration of your product. We can arrange to meet at a trade show, or you may wish to visit us in Cupertino. We'll give you feedback on the interface and design of your product, and we can discuss comarketing and promotional opportunities, if appropriate. Please refer to the Evangelism Organization and Functions chart in the Apple Contacts section to find out which evangelist it would be most appropriate to meet with.

One of the more valuable services Apple performs is that of matchmaker or catalyst. We can introduce you to others in the industry. Every day, we speak to people who are developing retrieval software, animation tools, system integration capabilities, and so on. Nonprofit institutions, especially, are eager to share their expertise and experiences in completing CD-ROM projects. We want to make these introductions for you, helping you to expand your network. Because of this, you must be very explicit with us about which parts of your project are confidential, and whom we can tell about your plans. We appreciate your confidentiality about our products, and we want to reciprocate.

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Product Design and Support

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Apple/Digital Development

If you are interested in developing distributed applications for the Macintosh® II and VAX™ environments, the following information on the Apple Computer and Digital Equipment Corporation agreement will be very helpful to you. It summarizes the Apple/Digital agreement and Apple's data communications networking direction, as well as highlighting development opportunities and support available from Apple.

What Is the Apple Computer/Digital Equipment Corporation Agreement?

On January 15, 1988, Apple Computer, Inc. and Digital Equipment Corporation announced a joint development effort to integrate Macintosh personal computers and AppleTalk® networks with VAX systems and DECnet™ networks. These development efforts will take advantage of open standards for desktop integration, based on the industry-standard Open Systems Interconnect (OSI) reference model of the International Standards Organization (ISO).

The agreement provides a framework under which the two companies will build an integration strategy to tie AppleTalk networks into larger DECnet/OSI networks. As part of the integration strategy, Apple and Digital will develop a consistent set of application, database, and networking interfaces to serve as a platform for third-party developers to write more consistent Macintosh-to-VAX products.

Customer demand has fueled the push to integrate the Macintosh computer with VAX systems. A Digital-Apple study has shown that customers are actively seeking ways to integrate and enhance the two systems. The joint development efforts will provide these customers with new opportunities for powerful, highly integrated multivendor solutions.

Apple and Digital will hold a joint developer conference in August to provide third parties with the information about technical specifications and programming interfaces they need to develop distributed applications for the Macintosh/VAX environment.

Apple's Networking and Communications Strategy

Apple's joint development agreement with Digital is an outgrowth of its overall networking and communications strategy. As such, it is best understood in the context of this two-pronged strategy—the keywords of which are *innovate* and *integrate*.

Elaborating on this strategy, in the networking and communications area, Apple has two primary goals: 1) to develop innovative value-added network and communications services to increase the productivity of individual users and workgroups; and 2) to integrate these innovative services seamlessly into any multivendor communications environment. This means that Apple will support communications standards, yet offer a unique approach to personal computing in a multivendor environment.

The drive to develop innovative solutions is rooted in Apple's user-centered view of computing. It





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is Apple's intent to have all information on a multivendor networked system available to Macintosh users as if it resided on the Macintosh itself. In other words, capitalizing on the easy-to-use Macintosh graphics-based interface, Apple wants Macintosh users to be able to work with information in the same simple way—irrespective of the computer, server, operating system, or network system on which it is found.

Equally as important as providing unique solutions is Apple's ability to integrate these solutions into multivendor communications environments. Apple wants its solutions to work with the major systems already installed in today's corporations, universities, financial institutions, and government agencies. Currently, Apple or third-party data communications products allow the Macintosh to support Digital, Hewlett-Packard, Tandem, Wang, and Prime systems; systems running AT&T UNIX®, and IBM systems large and small (including machines that run MS-DOS and OS/2).

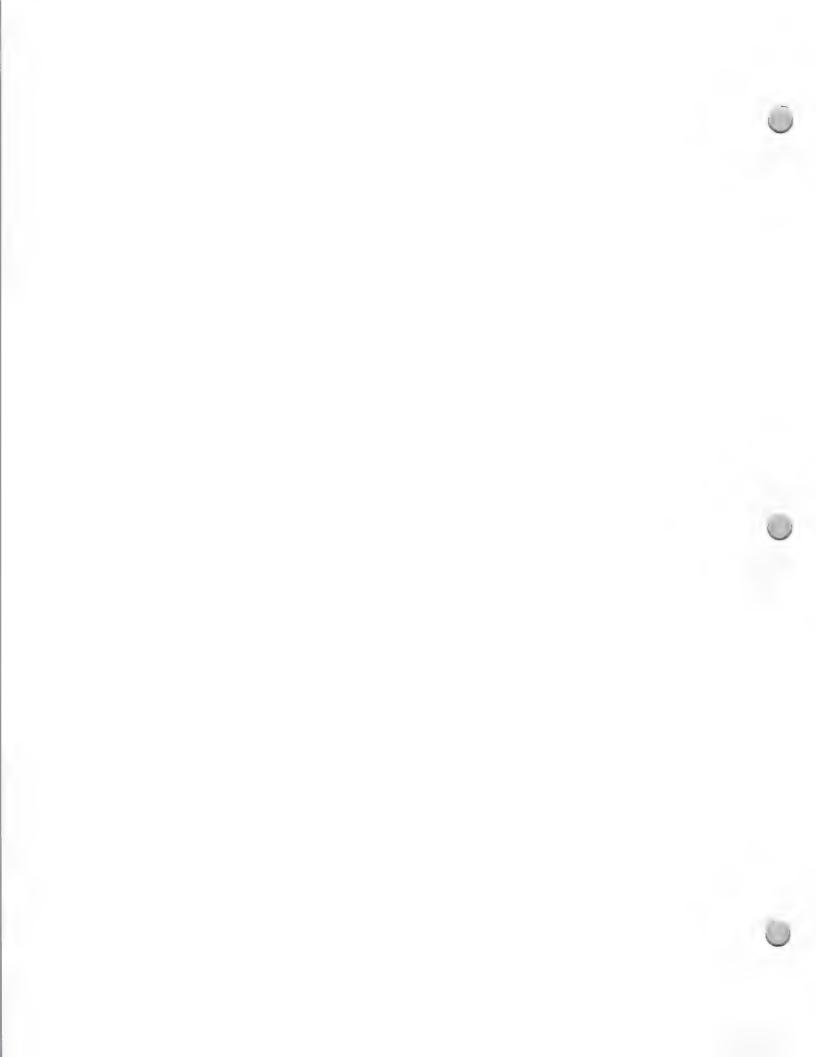
In addition to supporting multivendor connectivity, Apple also supports the emerging distributed processing and peer-to-peer architectures in IBM's SAA for microcomputer-to-host communications, including APPC, LU6.2, PU2.1; cooperative processing in the Digital VAX/VMS[™] environments; and the emerging international standards—OSI, X.25, and X.400.

To implement its communications strategy, Apple relies on a framework of eight computer and communications products:

- 1) The Macintosh Computer: The core of Apple's value-added contribution to the creation of innovative products, the Macintosh personal computer provides Apple's graphics-based user interface.
- 2) The AppleTalk Network System: Apple's flexible, media-independent, expandable, low-cost, simple-to-use networking system, it conforms to the ISO Open Systems Interconnect standard reference model. AppleTalk can be implemented on shielded and unshielded twisted-pair wiring, and fiber-optic and coaxial cabling systems. It has gained broad market acceptance, with more than 500,000 nodes installed.

AppleTalk for VMS provides AppleTalk connectivity to VAX/VMS.

- 3) Printing Technologies: Apple's high-quality printing stems from Adobe Systems' PostScript® page-description language, which enables the reproduction of everything from simple fonts to complex graphics. This high-quality output is produced on Apple's LaserWriter® printer.
- 4) Information Sharing: AppleShare®, Apple's standard file-sharing software, allows the Macintosh computer to obtain transparent access to all information on the network. This enables Macintosh computers to use the data and file capabilities of another computer on the network, such as a VAX or IBM system.
- 5) Internetwork Communications: Apple has defined standard ways to connect to large multivendor networks. This allows communications among AppleTalk networks and provides the ability to connect to large networks such as Ethernet or SNA.



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Development Opportunities

The Apple/Digital agreement increases development opportunities for Digital and Macintosh developers. It provides Digital and Macintosh developers with a suitable platform for both distributed applications in the areas of business, finance, engineering and desktop publishing, and Macintosh-to-VAX connectivity products.

The following is a more specific breakdown of these development opportunities:

- Distributed Applications
 - —CAD: finite-element modeling or three-dimensional surface modeling
 - -Software engineering design programs and parallel compilations
 - —Server engines for databases and AI applications
 - —Accounting and spreadsheet applications
 - -Multiuser desktop publishing
 - —Network versions of databases
- Macintosh-to-VAX Connectivity Products
 - —Terminal emulators
 - —Office automation tools
 - —Electronic mail
 - —Cooperative processing

Development Configurations and Documentation

To develop Apple-to-Digital applications on the Macintosh II computer, you will need the equipment, development tools, and documentation listed below:

Apple Equipment

- Macintosh II computer with a minimum of 2 megabytes of RAM
- Keyboard
- 12-inch monochrome monitor with 4-bit video card or 13-inch color monitor with 8-bit video card
- Apple 40-megabyte hard disk
- Apple Tape Backup 40SC (optional)
- Apple EtherTalk[™] Interface Card (optional)
- EtherTalk software 1.1 (optional)

Development Tools

- Apple products
 - —Macintosh Programmer's Workshop (MPW)/MacApp[™]. These products are available from the Apple Programmer's and Developer's Association (APDA[™]). Call (206) 251-6548 to become a member.





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- 6) Integration of MS-DOS and OS/2 Computers: With the use of appropriate hardware and software, AppleTalk allows transparent information exchange between Apple and IBM personal computers.
- 7) Network Management: Apple will provide AppleTalk-based network-management tools incorporating the Macintosh user interface, and integrate these network-management tools with IBM and Digital systems.
- 8) Multivendor Network Integration: Apple is committed to supporting existing and emerging communications and networking standards to ensure that the Macintosh can operate in any major systems environment. It supports IBM's SAA, LU6.2, and PU2.1; Digital VAX/VMS; TCP/IP; OSI; X.25; and X.400.

With this in place, Apple has the tools to work with third party developers to create an entire environment, including data communications, network services, transparent database access, and innovative applications.

Apple's Market Opportunities

The Macintosh personal computer has been very successful in providing the business, engineering, government, and higher education markets with business productivity solutions. With the introduction of the Macintosh II computer, Apple has the opportunity to further address the needs of these markets for complex and specialized solutions.

Our goal is to make the Macintosh II flexible enough to be configured for applications in major corporations, government agencies, universities, research facilities, and research and development departments—which often have multivendor environments. Providing integrated networking capability is essential to this goal.

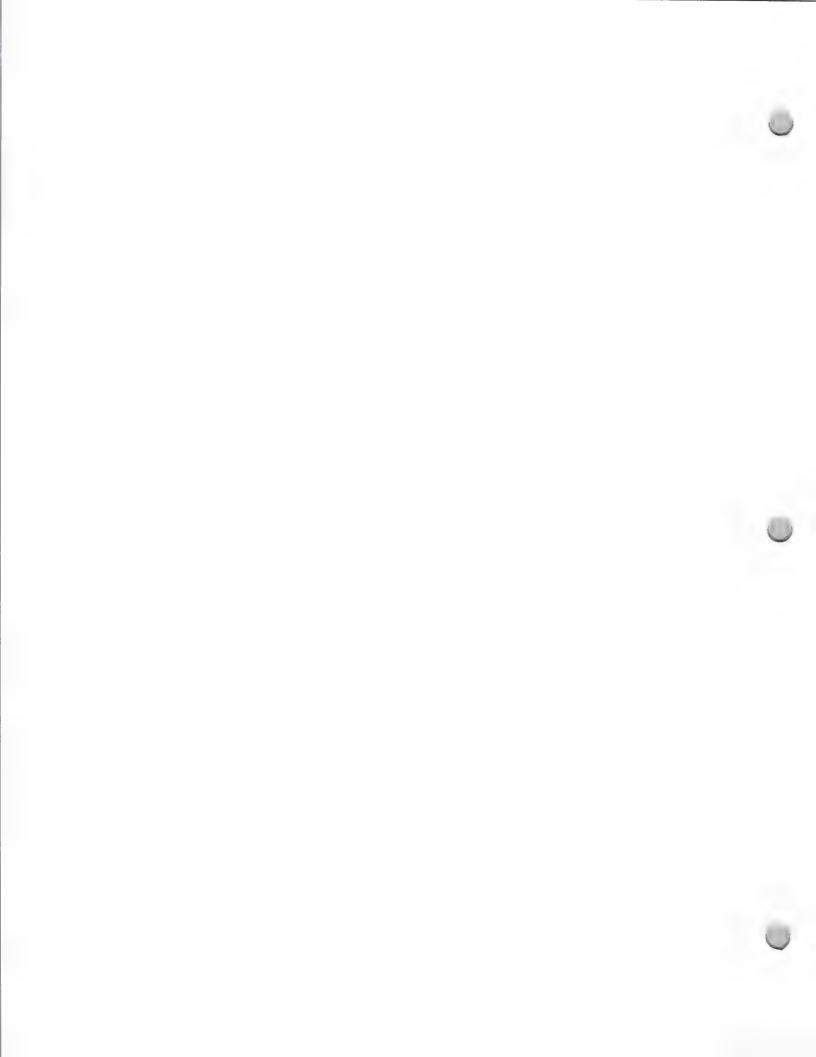
In conjunction with Digital, Apple has the ability to provide customers with a Macintosh II solution that will not only address their need for personal computer applications, but also their need for distributed processing and communications. The Macintosh II solution functions as both a personal computer and a powerful and "friendly" node in a VAX environment.

With connectivity to the Digital environment, Apple has the opportunity to:

- Increase the sales of Macintosh II systems by meeting customer needs for integrated communications and distributed processing capability
- Address VAX and Macintosh customers' demand for integrated applications

Expand the market for distributed applications in selected markets

It is Apple's intent to take the strength of VAX systems and networks and add its own expertise in the area of end-user needs, to allow Macintosh and VAX technology to be used by a much broader group of people.





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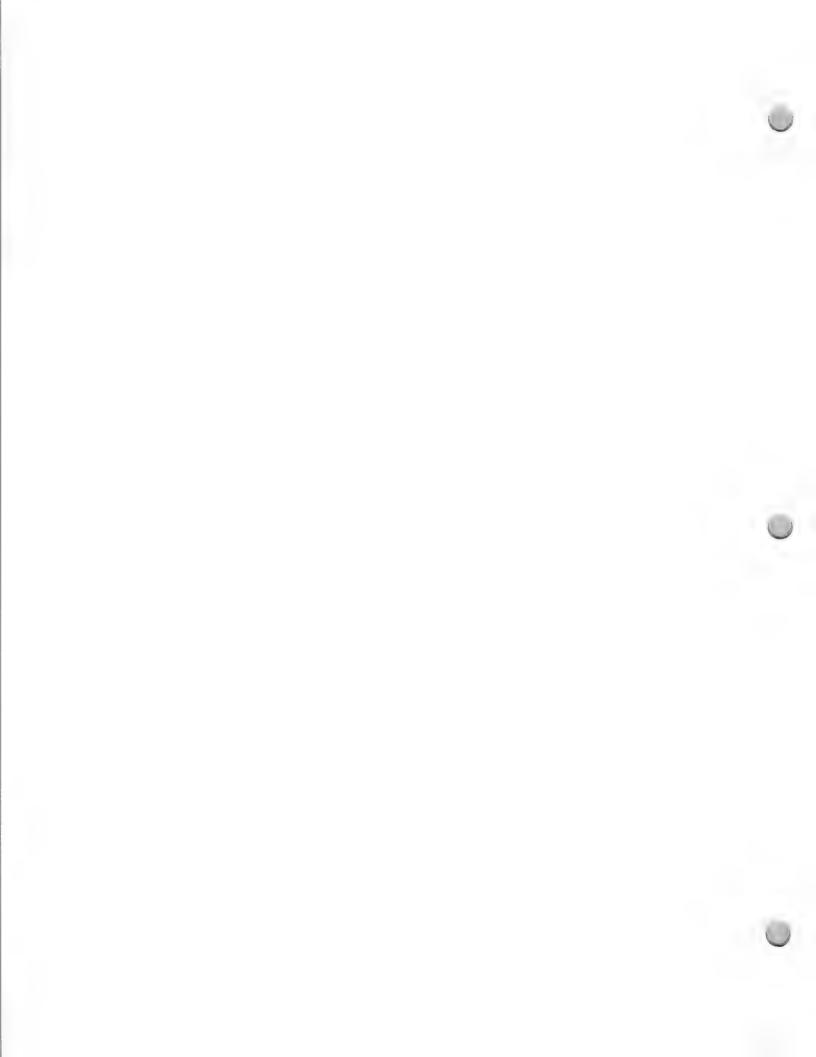
- —HyperCard®, which is available from authorized Apple dealers or through the Developer Purchase Program
- —MacWorkstation[™] (optional), which is available from Apple Software Licensing. Call (408) 973-4667
- —AppleTalk for VMS—also available from Apple Software Licensing
- Third party products—There are a number of third-party products that are fundamental to connectivity in this area. For a list and description of these products, contact Jim Tennessen at (408) 973-4897 or AppleLink®: TENNSSEN1.

Documentation

The following books are available through APDA.

- Inside Macintosh (Volumes 1–5)
- Inside AppleTalk
- · Human Interface Guidelines
- Applications Development in a Shared Environment
- Ethernet and Alternate AppleTalk Reference
- MacWorkstation: A Programmer's Guide
- MacWorkstation: Programmer's Reference
- AppleTalk for VMS documentation set

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Apple A/UX Development

If you are interested in developing UNIX-based applications for the Macintosh® II, the following information on Apple® A/UX™, Apple's implementation of AT&T UNIX®, will be very helpful to you. This document gives you an overview of A/UX, outlines A/UX development opportunities, and informs you of development support available from Apple.

What Is Apple A/UX?

A/UX is an implementation of AT&T's UNIX® System V, Release 2, Version 2 operating system for the Macintosh II personal computer. It conforms to the published System V Interface Definition (SVID) standard. A/UX combines the strength of an industry-standard multitasking operating system with the strength of Macintosh technology: it provides the power of a standard UNIX development environment enhanced by the personality of the Macintosh user interface.

A/UX serves as an alternate operating system for the Macintosh II. It represents our recognition of the need to support other operating systems and to allow software and data transportability between Apple's and other manufacturers' computers. As an industry-standard multitasking environment, A/UX will increase the functionality of the Macintosh II in multivendor or networked UNIX environments.

Standard UNIX Features

A/UX gives developers access to the most popular UNIX standards used today. It is built around AT&T's System V, Release 2, and includes key features from Berkeley's BSD 4.2 and 4.3 extensions, as well as support for TCP/IP and Sun Microsystems' Network File System (NFS®) network protocols.

With System V as the most common UNIX implementation in the business and government markets and BSD as the most common UNIX implementation in the higher education and engineering markets, A/UX provides developers with the standard platform for four major workstation markets.

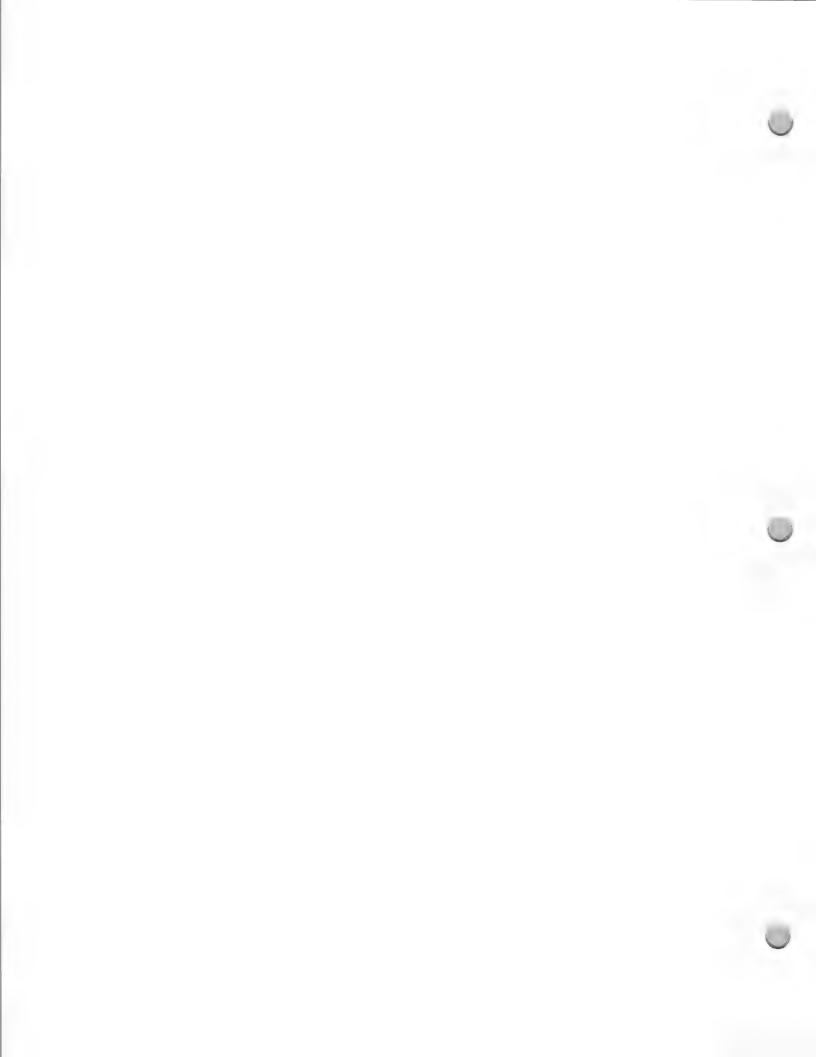
This standard platform permits A/UX to:

- Ensure source-code compatibility at the application level with other UNIX System V systems
- Allow easier porting of software created with BSD 4.2 and 4.3 extensions
- · Connect to existing Ethernet or serial networks with UNIX software and protocol compatibility

Features Added by Apple

In addition to key features of two UNIX standards, A/UX includes special features that allow A/UX applications to the following:

- Incorporate the Macintosh user interface
- Increase system reliability
- Reduce system administration requirements





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The following features help make A/UX one of the most attractive UNIX platforms for developers and customers:

Macintosh Toolbox Support

A/UX offers developers access to the Macintosh Toolbox—which controls user-interface options such as pull-down menus, multiple fonts, dialog boxes, and scroll bars—so programs written for A/UX can utilize the same user interface as the Macintosh.

Macintosh Binary Support

It is possible to launch existing, well-behaved Macintosh applications directly in the A/UX environment.

Startup

To boot A/UX, the user simply clicks on an A/UX icon. Unlike with other UNIX systems, the user does not have to type in a string of commands to start up an A/UX application.

Automatic Configuration

A/UX automatically reconfigures itself on startup to link device drivers for cards installed in NuBus slots of the Macintosh II. At system startup, the ports and slots of the Macintosh II are polled for hardware changes. If something new has been added to the configuration, appropriate drivers are automatically added to the kernel. This reconfiguration requires no operator intervention.

Automatic Self-Repair

A/UX keeps redundant copies of crucial system files so that in the case of a damaging crash it can automatically return the system to its operational state and repair lost or damaged system files.

TranScript ®from Adobe Systems, Inc.

A/UX includes the TranScript utility to format output from the UNIX Document Workbench documenter's processing system for printers, such as the Apple LaserWriter® printer, that use Adobe's PostScript®.

Apple's Market Opportunities

The Macintosh personal computer has been very successful in providing the business, engineering, government, and higher education markets with business productivity solutions. With the introduction of the Macintosh II computer, Apple has the opportunity to address the needs of these markets for complex and specialized workstation solutions.

Our goal is to make the Macintosh II flexible enough to be configured for workstation applications in government agencies, universities, research facilities, and the research and development departments of major corporations. For many workstation needs, UNIX is either strongly desired or required—so providing UNIX capability was essential to reaching this goal.

With A/UX, Apple has the ability to provide workstation customers with a Macintosh II solution that will not only address their needs for UNIX workstation applications but also address their needs for business productivity software. The Macintosh II solution functions both as a powerful workstation





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and as a personal computer.

This capability clearly differentiates the Macintosh II from the dedicated UNIX workstations on the market. The Macintosh II with A/UX runs all of the thousands of applications available for the Macintosh, as well as MS-DOS® applications. No workstation system has such an extensive application base.

With A/UX, Apple has the opportunity to:

- Increase the sales of Macintosh II computers by meeting customer needs for workstation capability
- Offer UNIX developers another and, in some cases, more desirable UNIX platform
- Expand the market for UNIX applications to nontechnical users
- Turn the Macintosh II into a top-selling UNIX computer

Apple has combined the strength of UNIX with its own expertise in the area of end-user needs to allow workstation and UNIX technology to be used by a much broader group of people.

A/UX will be supported through Apple's normal distribution channels, with customer training, technical support, service, and software updates. An A/UX Hotline Service will provide customers with technical support on a subscription basis.

Development Opportunities

A/UX increases development opportunities for both UNIX and Macintosh developers. It provides UNIX developers with another hardware platform for their UNIX applications, and Macintosh developers with a standard multitasking operating system for Macintosh workstation applications.

Apple encourages developers of UNIX applications to consider (1) porting existing applications to the A/UX platform and (2) developing new or enhanced A/UX-specific applications.

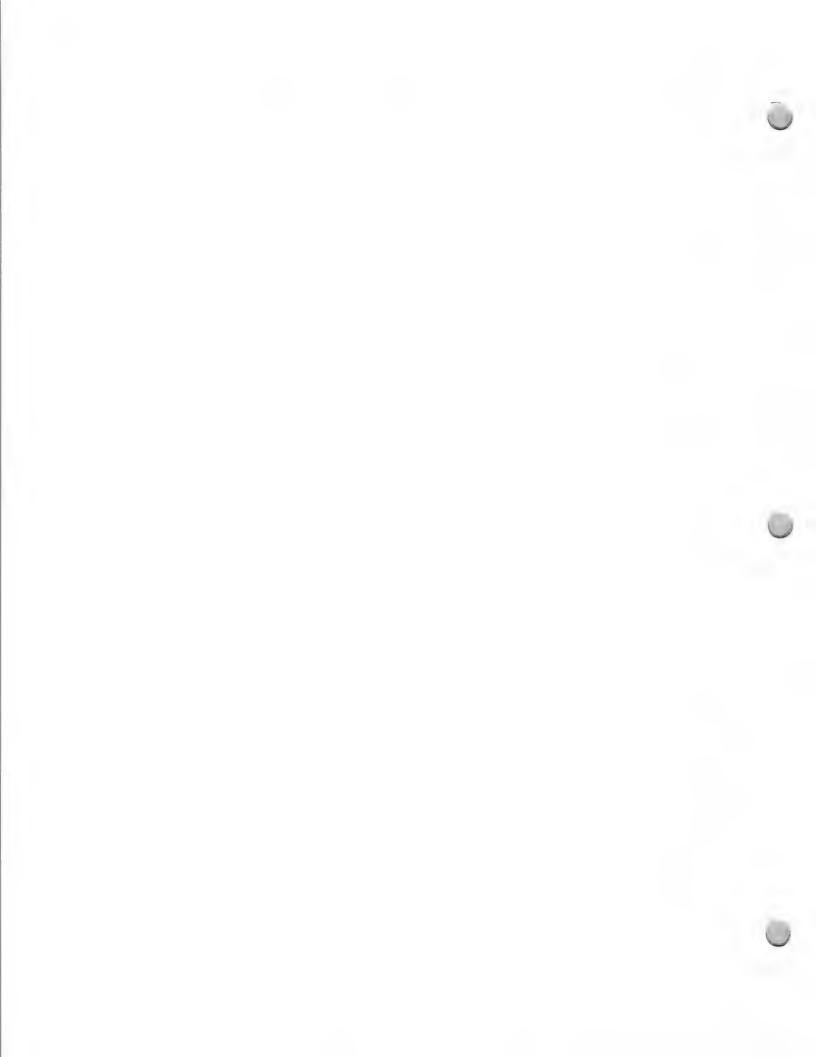
We encourage Macintosh developers to (1) test their existing Macintosh applications for compatibility with the ability of A/UX to launch conforming Macintosh binary applications, and promote that compatibility to new A/UX users and (2) develop A/UX workstation applications that take advantage of the user-friendliness of the Macintosh.

Required Development Configurations and Documentation

To develop A/UX applications on Macintosh II you will need the equipment and documentation listed below. The A/UX system includes a C compiler and other development tools.

Apple Equipment

- Macintosh II computer with a minimum of 4MB RAM and a 68851 PMMU chip
- Keyboard
- 12-inch monochrome monitor with 4-bit video card or 13-inch color monitor with 8-bit video card





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- A/UX on 80MB hard drive with A/UX Accessory Kit
- Apple Tape Backup 40SC (optional)
- Apple EtherTalk™ Interface Card (optional)

A/UX supports the Apple ImageWriter® II and LaserWriter printers and the Apple HD 20SC, 40SC, and 80SC hard-disk drives.

Documentation

- A/UX manuals (14-binder set)—sold separately from A/UX software

 Inside Macintosh Volumes 1-5—available through APDA (Apple Programmer's and Developer's Association). Call (206) 251-6548 for information about becoming a member of APDA.
- Macintosh Technote #117—available from APDA

Developer Support

Apple's Technical Support group is available via electronic mail to answer your questions as you develop your commercial products.

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If you are currently developing a spreadsheet or integrated application, the following information should be helpful. It is designed to give you a brief overview of the spreadsheet and integrated software markets. It will also give you some things to consider as you begin developing such applications, as well as some insight into working with Apple to develop technologically superior applications.

Market Opportunities for Spreadsheets and Integrated Applications

Spreadsheets and integrated programs are two of personal computing's oldest applications. Several products currently control major segments of these markets. This leads to the unfounded belief that limited opportunities exist within these areas for new developers or new products.

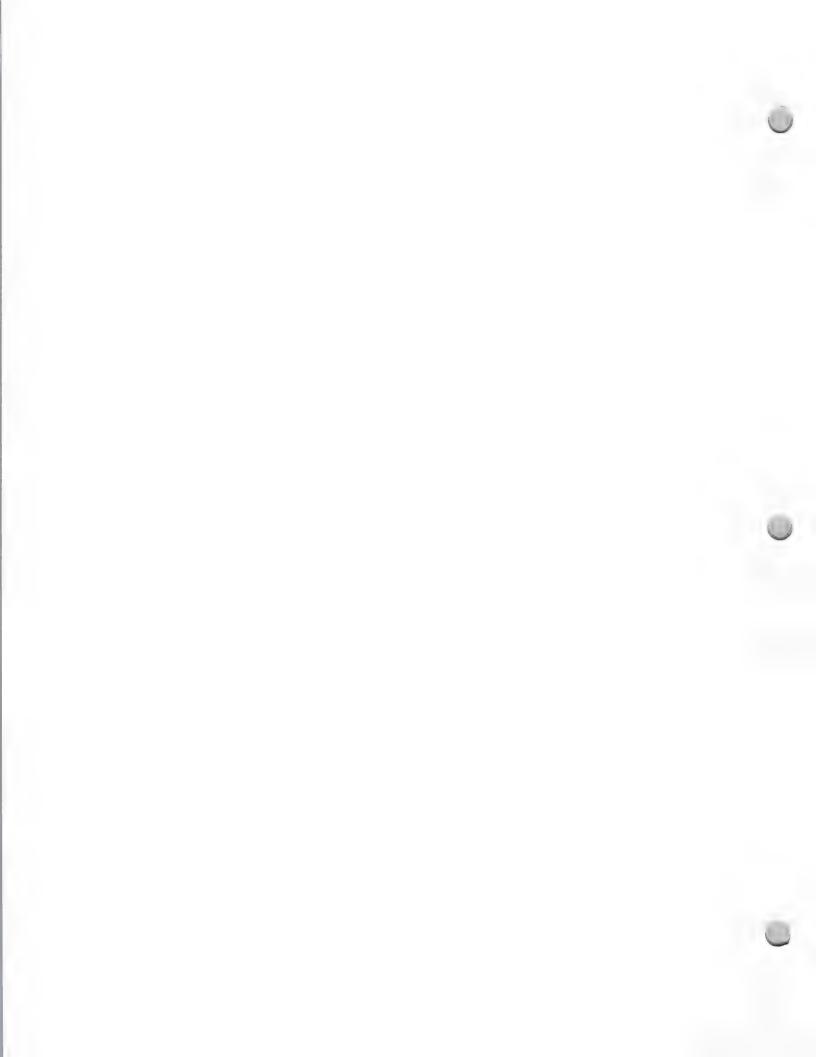
According to InfoCorp, a major market research firm, the spreadsheet market for all personal computers will reach annual sales of \$613 million by the end of 1989. Additionally, the market for integrated applications (those programs designed around several standard modules, including a fully functional word processor, spreadsheet, database, communications module, programming language, and so on) is expected to grow to \$233 million during the same period.

Thus, the potential combined market for these two related program categories is expected to be just under \$1 billion annually in less than two years. Add to this the fact that spreadsheets are the second-most-purchased application for all personal computers sold today (word processors being first), and it's easy to see that the spreadsheet market offers developers tremendous opportunities. The key to taking advantage of this market's potential is to find new and better ways to solve common business problems.

Designing Your Product

In order to develop products for the spreadsheet and integrated application markets, you need to make sure that you understand what makes such products successful. One way to do this is to examine other products in these categories and determine which features the most popular of these products have in common. Armed with that information, you can differentiate your products from others in the same category. You might consider the following items as you investigate developing spreadsheets and integrated applications:

- A list of useful features that differentiates your product
- A list of ways to improve common spreadsheet features
- A document detailing the needs of people and uses of products in your chosen market
- A list of capabilities your product must have in order to attract users who are familiar with other programs. Such a list might include:
 - The ability to use program files from other applications
 A way to use templates designed for other programs
 - —A way to use current applications written using the macro and command languages in other products





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- —A common command structure and/or interface
- A feature set that is attractive to both new and experienced users, which might include the following:

—A macro or programming language with learning mode

—An on-line tutorial and context-sensitive help

—Text, drawing, or painting tools, or other common Macintosh® tools

Have you thought beyond the boundaries of spreadsheets and integrated programs as they currently exist? Remember, just because you are developing a spreadsheet doesn't mean your product can't also include things like the following:

• The ability to print elaborate reports and forms

Features for preparing overhead slides and presentations

• Features for scholars, engineers, scientists, and businesspeople alike

Multitasking capabilities such as background recalculation during foreground data entry

• Features for sharing data with many other applications and environments

 Sound, interesting color capabilities, or the ability to communicate with specialized output devices such as film recorders

HyperCard™ interaction or hypertext features

AppleShare® and e-mail compatibility

Import and export capabilities for sharing data with accounting systems or database products

In products developed for its machines, Apple looks for the following things:

• AppleShare file server compatibility

• MultiFinderTM compatibility and features (background recalculation and background printing, for example)

• Adherence to Apple's user-interface guidelines

• File compatibility across applications and environments

HyperCard interaction or usage

Workgroup features and functions

Proper usage of development tools and hardware resources

No copy protection

Product support

System Configurations

Once your product idea is clearly defined, you need to determine the minimum Macintosh configuration on which to run that application. Obviously, the best situation is one in which your product runs on the broadest possible range of machines. In Apple's case, that currently means being compatible with the following:

- Macintosh Plus, Macintosh SE, and Macintosh II computers
- Apple® Hard Disk 20SC and other SCSI hard disks





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• ImageWriter® LQ, LaserWriter® IISC, LaserWriter IINT, and LaserWriter IINTX printers.

• The AppleShare file-server system.

In the area of spreadsheets and integrated programs, you might also want to consider alternatives to standard Apple configurations. Put simply, you might want to do applications for specific environments with special requirements, such as the following:

Using Macintosh systems as high-end financial workstations

• Using Macintosh systems to perform data-intensive financial-modeling operations

· Performing graphical analysis with color display and output

Performing on-line financial transactions and analysis

• Including specialized functions and features for other financial, statistical, engineering, architectural, or scientific forms of analysis

Working with Apple Evangelism During the Development Cycle

One of the first things you should do is contact the evangelist for your particular product area (refer to the organization charts earlier in this binder for help in locating the appropriate evangelist). Working closely with the Apple evangelists is important throughout your development cycle, but it's especially important if your development is in the early stages. Evangelists can help you accomplish many things:

Developing your product's feature set

• Understanding the Macintosh and Apple IIGS® interface guidelines

Working with other departments inside Apple

Helping you locate appropriate marketing groups

Understanding other products in the market in which you expect to sell your products

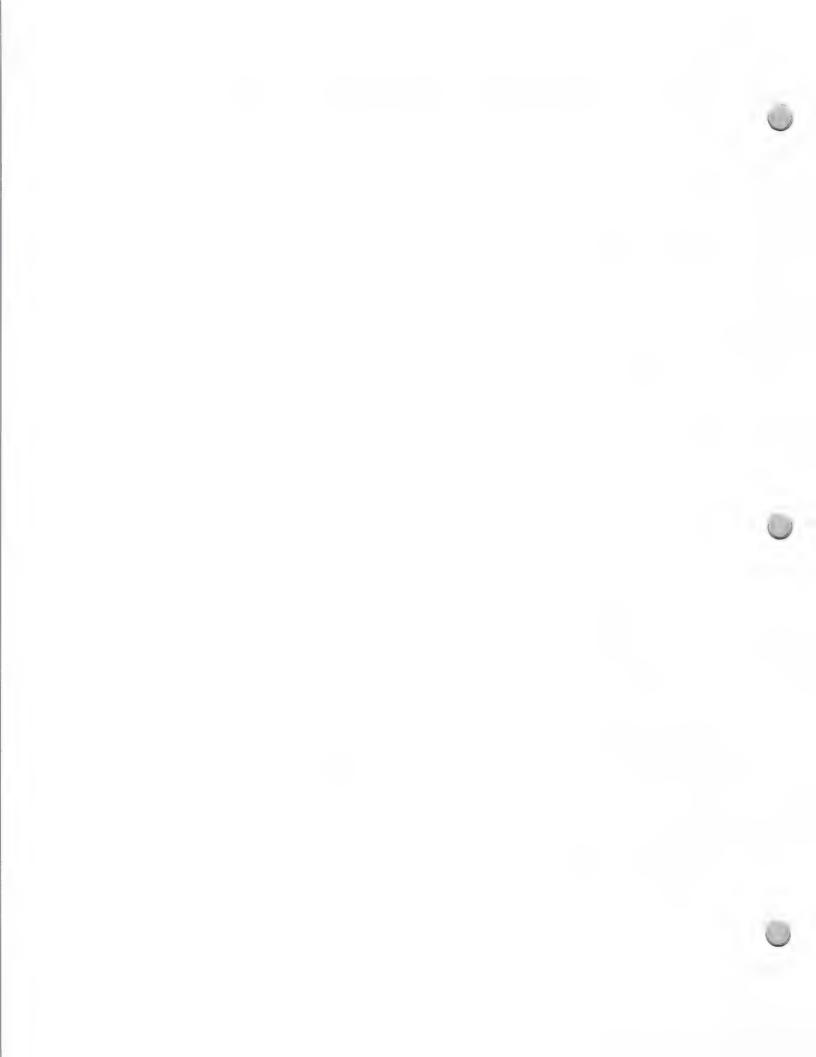
Helping you determine buyers' hardware requirements

 Keeping you abreast of developments and technology advancements within Apple and the development community

Determining vertical market opportunities within larger market segments

During development of your product, you should share your work frequently with Apple. Set up appointments to come by and show people what you are doing (call your evangelist or, if you can't come personally, involve your evangelist and have him/her present your product to other groups within Apple). Solicit feedback, and be receptive to ideas that might cause you to modify your product. Remember, Apple wants to offer you constructive ways to improve your products. Stay in touch with your Apple contacts to make sure that you are aware of any new developments in Apple's system software that might affect the development of your products.

Also, make sure that sometime during your product's development cycle you talk to Apple's Third-Party Marketing business contacts. They can keep you informed as to what marketing programs or trade shows will be taking place when your product is scheduled to ship. Your evangelist can help you locate the proper marketing contacts for your needs.





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We're Here to Help

Obviously, there is no simple way to go about developing software. The information in this section is designed to give you some basic ideas and to help you get started as you begin working with Apple and designing software for its computers. Use what you have read here and throughout the rest of The Information Exchange to get started. With the information contained in *The Information Exchange*, you have the key to working with Apple and its many disparate groups.

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HyperCard Development

Product Design & Support

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If you are considering developing an application using the HyperCard® software, the following information may be helpful to you. This document is intended to give you a general understanding of this innovative Apple product, including the development opportunities it offers and the support that is available.

What Is HyperCard?

HyperCard is a personal software toolkit that gives you the power to manipulate information stored in the form of text, graphics, video, or sound. HyperCard lets you organize and access information in much the same way as you think—by association and context as well as hierarchy. With HyperCard, you can browse through large bodies of information or search quickly for a specific fact. In addition, HyperCard offers an easy-to-use English-based scripting language called HyperTalkTM, which allows you to further customize its abilities.

HyperCard uses a simple metaphor: the index card. *Cards*, which are the basic units of information, are organized into *stacks*. You can treat HyperCard cards just as you would standard index cards; you browse through a stack of cards, sort or reorder the cards, or add information (text or graphics) to the cards.

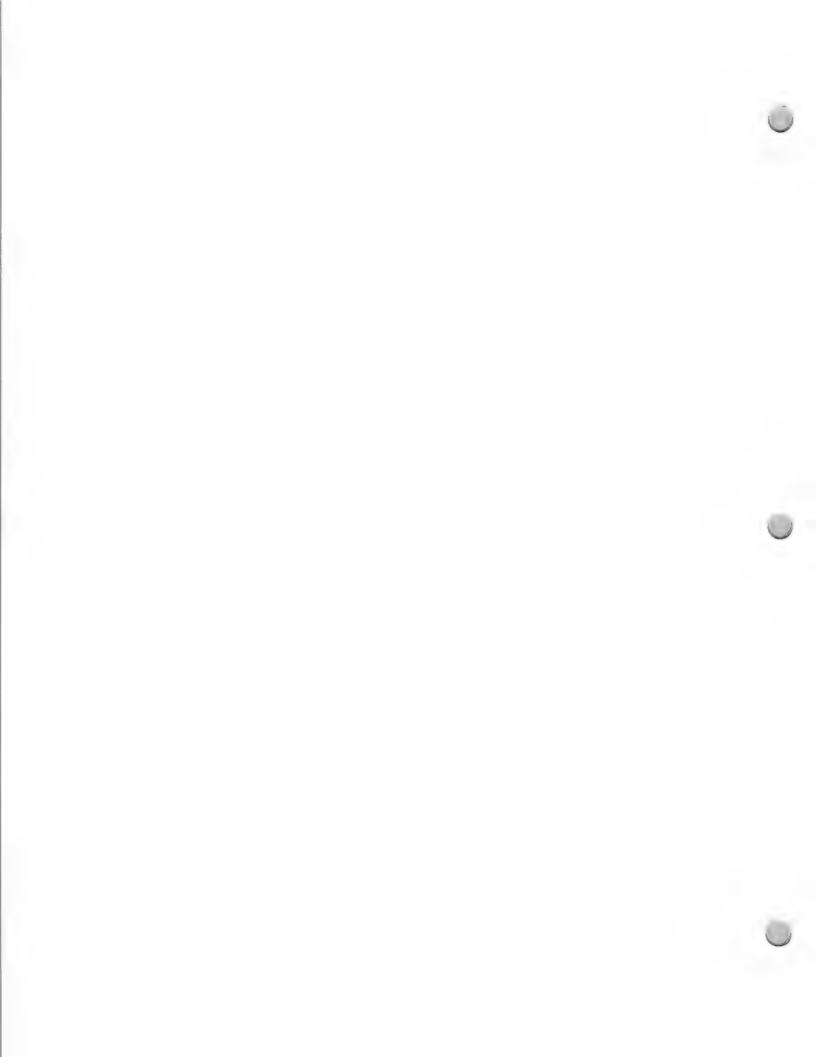
But HyperCard cards offer significantly more flexibility than index cards. They can be linked to other cards by adding *buttons*—one of the most powerful features of HyperCard. Buttons let users create personalized links to related cards in other stacks. Buttons allow users to link facts, concepts, and images, as well as to perform a variety of tasks, such as launching another Macintosh® application, dialing the telephone, sorting a stack, or finding a videodisc sequence. The maximum single stack size is 550 megabytes.

How HyperCard Works

HyperCard works on a variety of levels. At the simplest level, it functions as an "information player," allowing users to browse through bodies of information. For example, stacks containing quotations, clip art, and a list of area codes in the United States and Canada come with HyperCard and can be browsed through easily.

At a higher level, users can add information to the desktop stacks that are included in the package (an address file, datebook, and to-do lists). Users can also customize stacks (by adding a field to the address book or changing the background pattern on a page), painting, and printing. StackwareTM is the term Apple has coined to describe the applications developed using HyperCard technology.

In short, HyperCard is a development platform that facilitates the creation and organization (remote or local) of bodies of information. It includes a powerful scripting language and makes it easy for you to customize existing stacks or create your own—for personal or commercial use.





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A Few Specifics About HyperCard

Currently, the HyperCard file formats are proprietary, so we cannot make that information available. Likewise, the HyperCard source code is not available for licensing. However, you can license HyperCard's binary code; simply contact Apple Software Licensing for an application, as well as for information about fees and usage. Apple does not support HyperCard development for 512K Macintosh computers because HyperCard requires a minimum of 700K of RAM.

What Are the Development Opportunities?

HyperCard provides an excellent alternative to standard publishing as a delivery vehicle for information. Additionally, HyperTalk can be used to control external devices such as videodisc players, or to access information from on-line information services through the use of XCMDs. HyperTalk also allows you to control the way text, graphics, and video are integrated and organized.

For the education market, you might develop curriculum or subject-matter stacks, or stacks for interactive learning. For the business market, you might provide directories, reference materials, or demographic data. Interactive learning stacks are appropriate for business and industry. And some industries welcome parts catalog stacks; for example, a catalog for mechanics might allow them to point to a diagram of an engine and then point to specific buttons to display part numbers, prices, or suppliers.

When To Use HyperCard

HyperCard is good for screen-based presentations, information publishing (reference, books on disk, indexes), and data management. It's also good for multimedia control (for example, providing an easy-to-use front end to videodiscs, enabling interactive video authoring, or furnishing an index to the contents of a CD-ROM), low- to medium-performance telecommunications prototyping, and computer-based interactive learning (on-line help, documentation, tutorials, dealer demos, sales tools).

When Not to Use HyperCard

As a general rule, don't use HyperCard as a substitute when a dedicated application already exists, such as for sophisticated word processing, high-end database needs, general-purpose terminal emulation, or structured vector graphics. In addition, don't use it for redundant and dense volumes of text; large, single, uncompressed, digitized sound; or applications requiring large screens.

HyperCard and CD-ROM

HyperCard Version 1.2 or higher supports CD-ROM. For an update, see your local authorized Apple dealer.





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HyperTalk Programming

As previously mentioned, one of the HyperCard software's unique features is its built-in programming language. HyperTalk helps simplify programming in two ways: first, while most programming languages require you to write entire programs, HyperTalk only requires that you write short scripts; second, HyperTalk uses command lines that resemble simple English sentences; for example, "Go to card 1 of this stack" and "Open 'Expenses' with Excel."

To learn more about scripts and stack guidelines, you can purchase the *HyperCard Script Language Guide*, which is part of the HyperCard Technical Reference Package that's referenced later. As with other Macintosh development, human interface design is a critical facet of HyperCard development. To help developers design stacks that adhere to the Macintosh human interface standards, Apple publishes *The HyperCard Stack Design Guidelines* (available through the Apple Programmers and Developers Association).

System Requirements

To use HyperCard, you will need a Macintosh Plus, Macintosh SE, or Macintosh II with a minimum of 1 megabyte of RAM and two 800K floppy disk drives (or one 800K floppy disk drive and a hard disk drive). We strongly recommend a hard disk drive for HyperCard development, and at least 2 megabytes of RAM for use with the MultiFinder™ operating system.

How Can I Get HyperCard?

HyperCard is included with all new Macintosh CPUs, or you may purchase it through the Developer Purchase Program as a separate product (part number M0556).

How Can I Get HyperCard Technical Support?

All Certified Apple Developers are eligible to receive technical support for HyperCard or any other development system. See the note called "Developer Technical Support" under "Apple Contacts" for more information. Take a look, too, at the note in this chapter called "HyperCard Resources."

How Can I Get in Touch With Other HyperCard Developers?

A good place to start is AHUG, the Apple HyperCard User Group. It was founded by the HyperCard Team to provide end users with a direct connection to the ongoing development of HyperCard. AHUG offers local activities for Macintosh and HyperCard enthusiasts in the Cupertino/San Francisco Bay Area. The yearly membership fee is \$10, and you can join by writing to the following address:

Bryan Carter, Apple HyperCard Librarian Apple Computer, Inc. 20525 Mariani Avenue, M/S 27-AHUG Cupertino, CA 95014 AppleLink®: UG.AHUG





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Where Can I Get HyperCard Documentation?

HyperCard documentation is available through the Apple Programmers and Developers Association (APDATM). For HyperCard training programs and books, read the note in this chapter called "HyperCard Resources." The following is a description of the available documentation and tools:

- HyperCard Script Language Guide: This document is valuable if you are interested in using HyperTalk or developing stacks. If you are an APDA member, you can purchase the HyperCard Script Language Guide through the APDA. It also exists as a bound book, published by Addison-Wesley. If you are not a member of the APDA, and are interested in acquiring this documentation, please refer to the information on the APDA located in the Distribution section.
- The Videodisc ToolKit: The ToolKit is a two-disk set that includes all the additional software you need to start using and creating HyperCard videodisc applications. In order to use this ToolKit, you'll need a Macintosh with at least 1 megabyte of memory, Macintosh system software version 4.2 or later, and HyperCard.
- The HyperCard AppleTalk ToolKit: This ToolKit provides everything you need to use the AppleTalk® Transaction Protocol and AppleTalk Name Binding Protocol from HyperCard. It includes a set of XCMDs and XFCNs that extend HyperCard to allow access to these facilities. It also includes the source code for the XCMDs and XFCNs. This code will serve as an example if you want to write your own XCMDs and as a starting point if you want to build more sophisticated AppleTalk access. (Note: This version of the ToolKit does not support zones, so all HyperCard stations must be in the same zone. Future versions of the ToolKit may add zone support.)

To use any part of the source or object code in this ToolKit in a commercial product, you must first obtain a license from Apple Computer. For licensing information, contact Apple's Software Licensing department (Apple Computer, 20525 Mariani Avenue, M/S 38-I, Cupertino, CA 95014).

- HyperCard Developer's ToolKit: This product contains the HyperCard Stack Design Guidelines and a disk with documentation on writing XCMDs and XFCNs, interfaces for XCMDs, sample XCMDs, examples of stacks which use XCMD resources. It is also distributed through the APDA.
- HyperCard Serial Port ToolKit: This ToolKit contains everything you need
 to access the serial ports of the Macintosh from HyperCard. Besides the XCMDs
 and XFCNs needed, the ToolKit also provides a complete set of documentation and
 the full source code for the XCMDs and XFCNs.

And finally, contact Peggy Redpath at M/S 51-AB to discuss your specific product plans.

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Introduction

For in-depth technical support on HyperCard, developers should use AppleLink or MCA Mail to contact Developer Technical Support (see notes on these topics elsewhere in this package). But there are many other outside resources you can use to supplement your knowledge on HyperCard, and this lists a few of them.

The Apple HyperCard User Group

The Apple HyperCard User Group (AHUG) has been created to solicit HyperCard feedback for Apple Computer and to provide users and developers with educational, technical, and practical information about HyperCard.

As a member of AHUG, you will receive three newsletters; "Windoid" (technical), "Patterns" (informational), and one with a marketing focus, as well as access to the STAKTrak Network. which is a networking system that includes the STAKTrack HyperCard Library Exchange, HyperCard Resource Listing, and General News Listing. Local and national meetings and training will also be available. Membership dues are \$10.00 per year.

To become a member of the Apple HyperCard User Group, send a stamped, self-addressed envelope for the membership form to this address:

HyperCard User Group M/S 27-AHUG Apple Computer, Inc. 20525 Mariani Avenue Cupertino, CA 95014

Books on HyperCard

Compute's Quick & Easy Guide to HyperCard by Steve Ansovin Compute Publication

XCMDs for HyperCard by Gary Bond MIS Press 1107 NW 14th Avenue Portland, OR 97209

HyperTalk and External Commands, A Pocket Reference by David Gewirtz HyperPress 1061 Beach Park Blvd., Suite #201 Foster City, CA 94404





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The Complete HyperCard Handbook
Danny Goodman's HyperCard Developer's Guide
both by Danny Goodman
Bantam Books
666 Fifth Avenue
New York City, NY 10103

Understanding HyperCard by Greg Harvey Sybex Publishing 2021 Challenger Drive Alameda, CA 94501

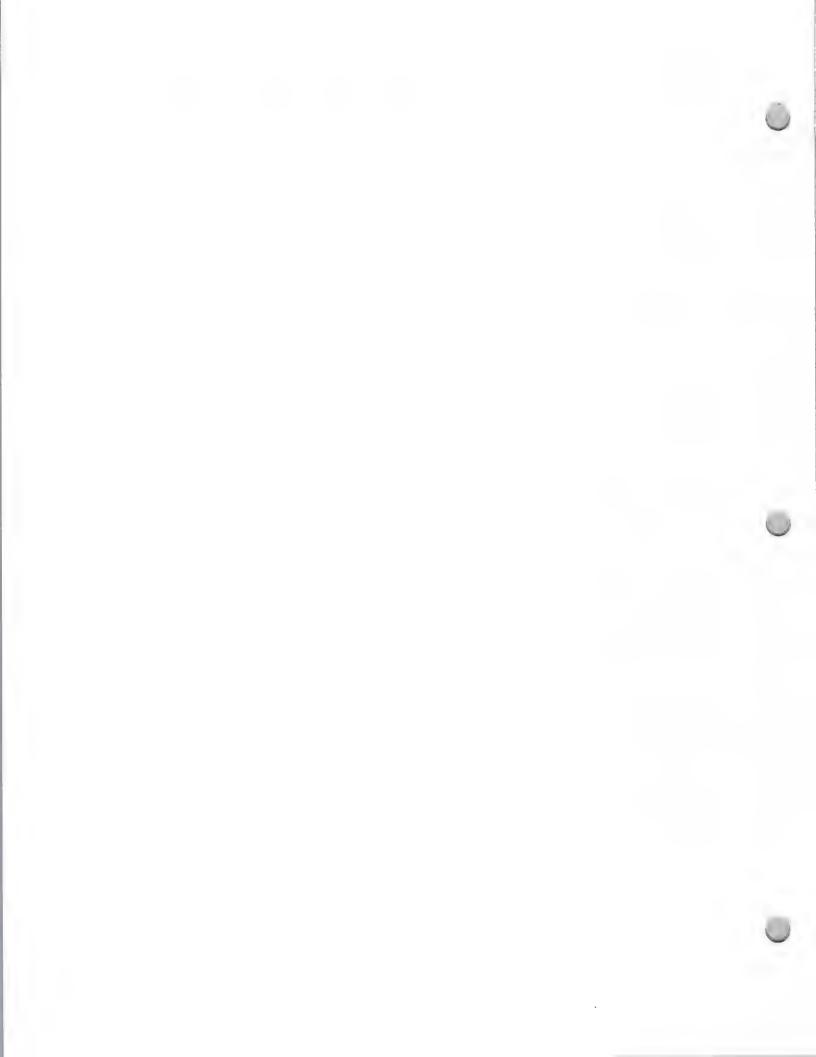
HyperCard Power: Techniques & Scripts by Carol Kaehler Addison-Wesley Route #128 Reading, MA 01867

HyperCard Made Easy by William B. Sanders Scott, Foresman, & Co. 1900 East Lake Avenue Glenview, IL 60025

HyperTalk Programming
HyperTalk Programmer's Guide
both by Dan Shafer
Hayden Books, 1988
4300 West 62nd Street
Indianapolis, IN 46268

Concise Guide to HyperTalk by Barry Shell MIS Press 1107 NW 14th Avenue Portland, OR 97209

HyperCard Script Language Guide by Allen Spragens APDA 290 SW 43rd Street Renton, WA 98055





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HyperCard Scripting: A HyperTalk Language Guide by Jeff Stoddard Walking Shadow Press P.O. Box #2092 Saratoga, CA 95071

Applied HyperCard
(Developing and Martketing Superior Stackware)
by Jerry Daniels & Mary Jane Mara
Brady Utility Software
Simon & Schuster, Inc.
1 Gulf & Western Plaza
New York City, NY 10023

HyperCard Training

HyperTutor (HyperCard stack) ChannelMark Corporation 2929 Campus Drive San Mateo, CA 94403

Script Expert (HyperCard stack) HyperPress 1061 Beach Park Blvd., Suite #201 Foster City, CA 94404

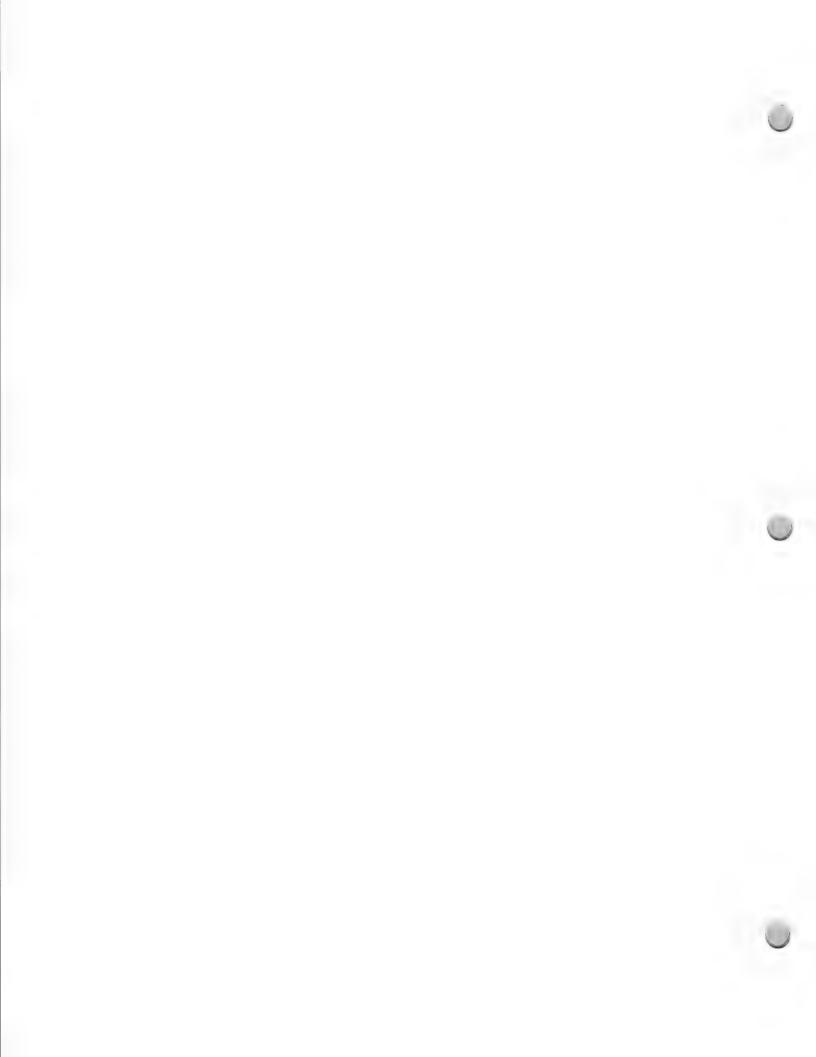
HyperEasy Training Courses (Audio cassettes) Personal Training Systems P.O. Box #54240 San Jose, CA 95154

HyperCard Video Tutorial (Video) Voice & Video, Inc. 5038 Ruffner Street San Diego, CA 92111

Quick Results with HyperCard PCW Communications 501 2nd Avenue San Francisco, CA 94107

HyperCard Publishers

Broderbund Software 17 Paul Drive San Rafael, CA 94901 415-329-0800





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ChannelMark Corporation 2929 Campus Drive San Mateo, CA 94403 415-345-5900

Heizer Software P.O. Box 232019 Pleasant Hill, CA 94523 415 943-7667

HyperPress Publishing 1061 Beach Park Blvd., Suite #201 Foster City, CA 94404 415-345-4620

Individual Software 125 Shoreway Rd., Suite 3000 San Carlos, CA 94070-2704 415-595-8855

MediaGenic 3885 Bohannon Drive Menlo Park, CA 94025-1001

The Skeibo Press, Inc. 44 Forster Avenue Mount Vernon, NY 10552 914-699-0200

Stackware Solutions, Inc. 8008 Shoak Creek Blvd. Austin, TX 78758

The VoyagerCompany 2139 Manning Ave. Los Angeles, CA 90025 213-475-3524

Walking Shadow Press P.O. Box #2092 Saratoga, CA 95071





Legal Market Applications

Product Design and Support

August 1, 1987

Designing applications for the legal market

When designing applications for the legal market, it is important to work with people who are experts in the specific requirements of law firms. The American Bar Association (ABA) has formed a group called the Legal Technical Advisory Council (LTAC) to assist hardware and software vendors in better meeting the needs of law firms. The LTAC also produces publications that serve as key software evaluation references for law firms evaluating software to purchase.

The LTAC publishes functional requirements and standards in a number of key applications areas, such as word processing and time and billing. It tests software submitted by developers and publishes test results. Many people believe that the LTAC will exercise increasing influence over the software law firms will purchase. We believe that the LTAC could be particularly helpful to developers of products for Apple® computers who are seeking ways to overcome lawyers' conservative buying practices. For more information about the LTAC contact:

Richard L. Robbins LTAC American Bar Association 750 North Lake Shore Drive Chicago, IL 60611 (312) 988-5637

The following resources can assist you in learning about the needs and opportunities in the legal market:

Legal publications

The American Bar Foundation (the research arm of the American Bar Association) publishes a variety of helpful documents, which can be found at any law library. Among those you may wish to consult are the following:

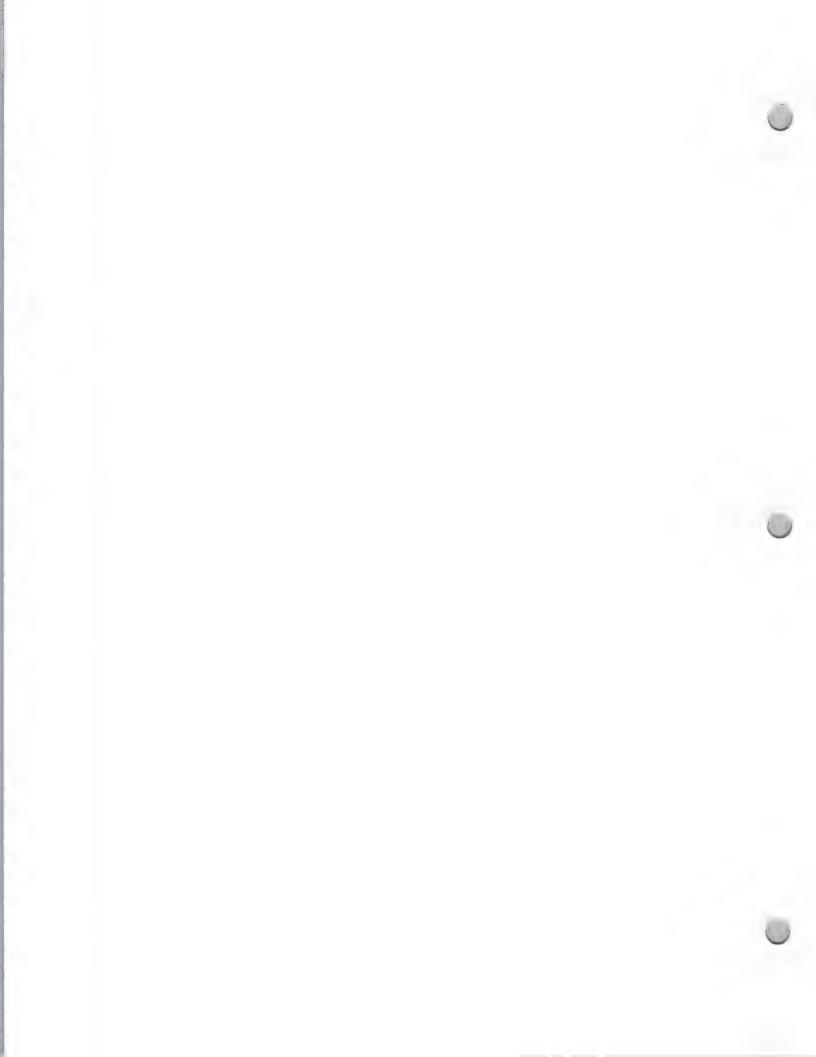
The Legal Profession in the United States, by John Flood Dissemination Department American Bar Foundation 750 North Lake Shore Drive Chicago, IL 60611

The Lawyer Statistical Report

A Statistical Profile of the U.S. Legal Profession in the 1980s, by Barbara Curran, with Katherine Rosich, Clara Carson and Mark Puccetti. American Bar Foundation, Chicago, 1985.

ABA Journal

This is one of the most widely distributed magazines for lawyers—delivered to about half the lawyers in the U.S. When designing your marketing strategies, it is important to keep in mind that the overwhelming majority of practicing attorneys are practicing primarily state—as opposed to federal—law. As a result, state bar publications tend to have a greater readership than the nationally oriented ABA Journal.





Legal Market Applications

Product Design and Support

August 1, 1987

State and national bar associations

Bar associations—on both the state and the national level— are good sources of information.

There are more than 1,700 bar associations in the U.S. Some are very small; others, such as the Chicago Bar and the L.A. County Bar, have more than 20,000 members. Many of these groups publish newsletters and magazines, and host regular meetings and conferences. Some have special groups focusing on law practice automation issues and opportunities.

National associations include the American Bar Association, the Federal Bar Association, the American College of Trial Lawyers, the American Trial Lawyers Association, the National Association of Women Lawyers, and others. Many of these groups have annual meetings, which may include trade show and exhibit opportunities.

User groups

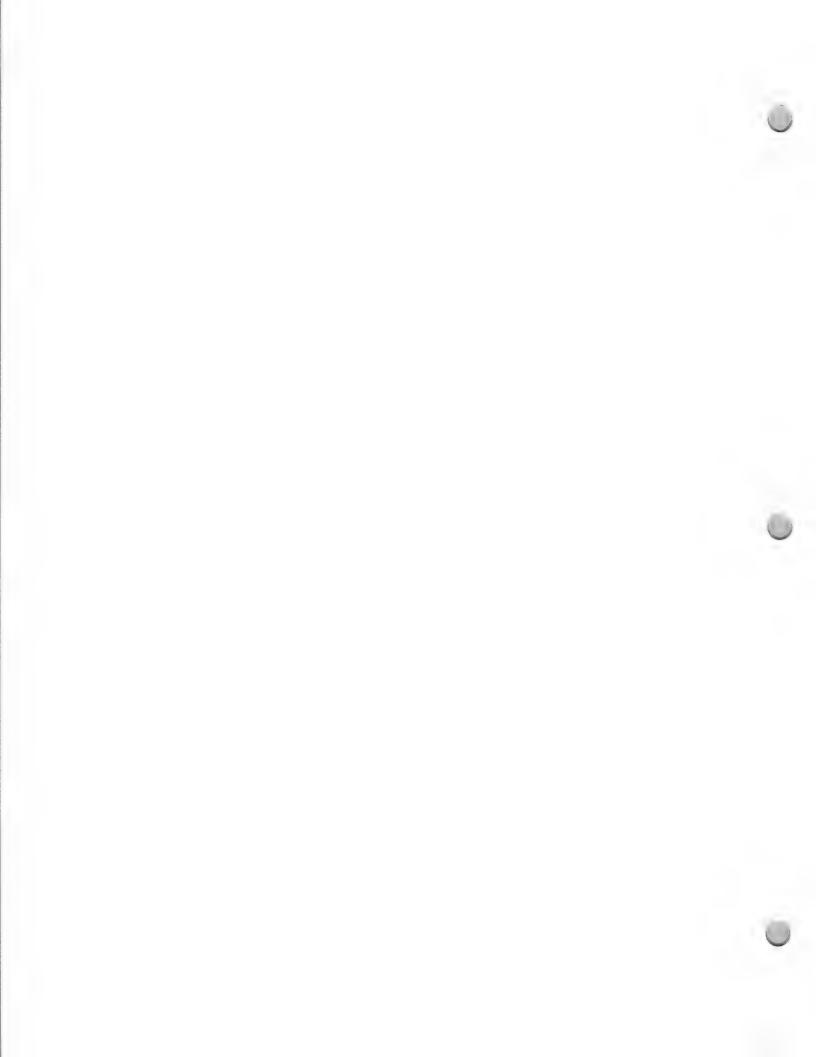
There is an active Apple User Group within the ABA and often legal special-interest groups within many of the larger Apple User Groups.

Recommended configuration

We strongly recommend that your legal product(s) be compatible with the following business configuration:

- Macintosh™ Plus, Macintosh SE, or Macintosh II personal computer
- Hard Disk 20SC (minimum)
- ImageWriter® LQ or LaserWriter® printer
- AppleShareTM file server system

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Business Development

Product Design and Support

October 1, 1988

Developing and marketing successful business applications for the Apple[®] MacintoshTM personal computer requires some fundamental understanding of the issues important to business users. The most important thing to do in developing for the business Macintosh market is to follow the Macintosh User Interface Guidelines. However, there are also a number of other criteria that are important. Consider all of the following when developing your products:

Macintosh User Interface Guidelines

The principal advantage offered by Macintosh is consistency across applications. This is particularly true in the business setting, where training expenditures are closely monitored. Those applications that adhere to the User Interface Guidelines will be able to take advantage of this market phenomenon, and will be perceived as easy to learn, hence inexpensive to use. Experience teaches us that those vendors who do not adhere to the User Interface Guidelines quickly learn just how important this issue is.

Apple's Developer Technical Support staff has issued an entire collection of Technical Notes, which set forth the proper methods for accessing special features of the Macintosh not otherwise documented in *Inside Macintosh*. To ensure compatibility with all future Apple designs, follow these recommendations. This will further the goals of consistency, as well as save you the troubles and cost associated with product revisions.

Common Macintosh Business Configuration

Your product(s) should be compatible with the following business configurations:

- · Macintosh Plus, Macintosh SE or Macintosh II
- HD 20SC (minimum)
- Imagewriter LQ or LaserWriter
- AppleShare Network File Server

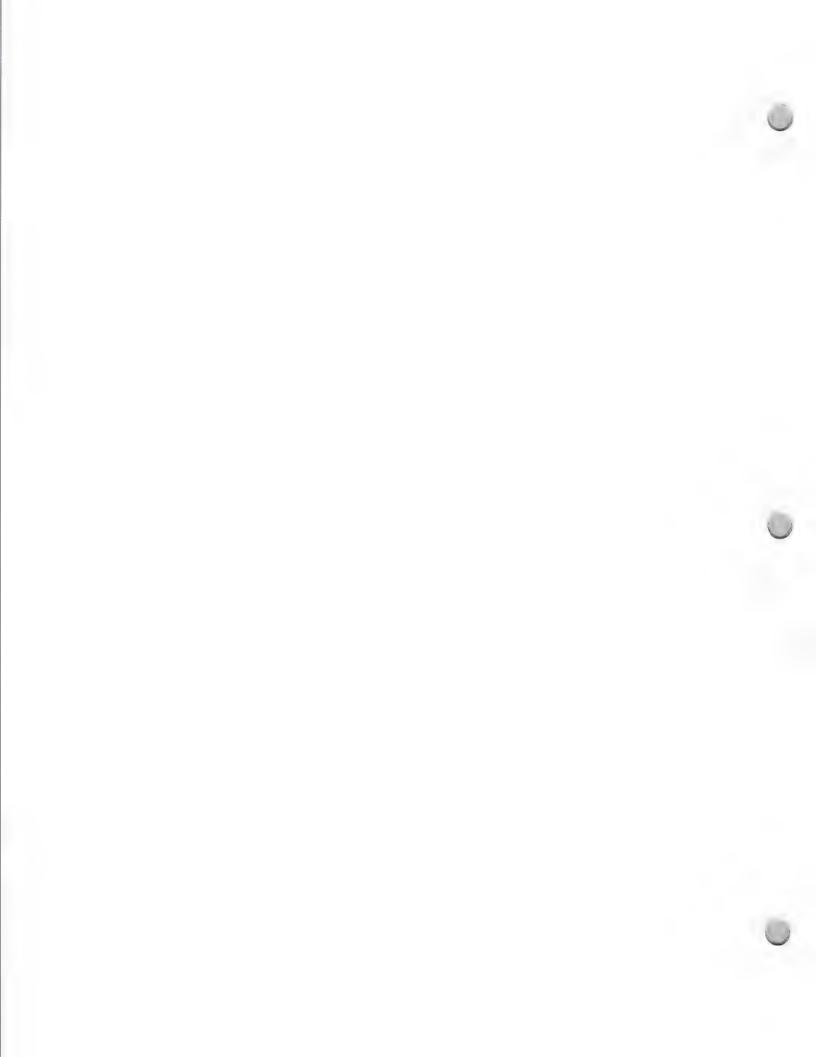
Apple has found that approximately 75-80 percent of all Macintosh users have a hard disk, and this percentage is likely to be significantly higher in the office.

Copy Protection

Copy protection schemes that disable hard disk use are likely to be rejected by a large number of users. Therefore, the trend among software developers is not to copy protect their business software. Vendors who continue to copy protect their software place themselves at a significant competitive disadvantage to the ever-increasing number of vendors who do not. Even the most innocuous schemes will have this effect, since they inconvenience your customers and give the impression that you do not trust them.

Saving the User Time

Business purchases are driven by the desire to increase productivity. Applications that require users to increase the time spent accomplishing a task will make them want to return to their "manual," or pre—computer method. Be sure your software is designed to *decrease* rather than to increase the





Business Development

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amount of time it takes to accomplish a task.

Support

Business users are demanding more support, so be sure to consider this important item early in your planning. When business users buy software, they expect the developer to provide toll-free support lines and/or contracted support assistance. In addition, product reviewers for magazines use product support as a major criterion in determining the overall rating for software and hardware products.

Upgrades

You will eventually need to upgrade your software, so plan for it now. Many vendors are offering free upgrades to registered users. If you can comfortably plan for such a policy, it will entice your users to send in their registration cards, thus giving you valuable market information.

Networking

With the increasing use of shared hard disks, your products should, at a minimum, be compatible with the AppleShareTM file server. Think about ways to allow shared files. IBM file conversion capabilities will also be increasingly important. Eventually, you will find that Apple will only help promote those applications which are "AppleShare Aware".

Intelligent Software

Think about ways to make your software more intelligent, in the sense that it can better anticipate what the user wants to do. Maybe this involves keeping track of what the user did last or what the user does most often. These are great ways to make the business user more productive.

Compatibility with Other Software Products

Look for other products that complement your applications. Consider making the products in your software line compatible with one another as well as compatible with best-selling products from other vendors. Also consider ways in which you can build a more specialized product that works with general productivity products. In general, make sure your product works with other Macintosh software, allowing file conversion in both directions.

Application Opportunities

Business Marketing is focusing on general-purpose productivity tools (such as financial analysis, data management, and word processing), small-business accounting, desktop publishing, and communications. Areas of exploration are engineering (CAD), information services, and various vertical markets, specifically legal, small manufacturing operations, medical, and real estate. Remember: for additional help in developing business-related software, keep in close contact with the Evangelism group at Apple.

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October 1, 1988

Developers offering solutions to meet the critical needs of small businesses have an enormous potential market. Apple defines small businesses as companies with 100 or fewer employees and/or up to about \$10 million in gross sales. In the United States, there are at least 7 million such companies, plus millions more self-employed. The buying power of these small businesses should not be underestimated. A 1986 study of more than 2,000 small businesses revealed that their average investment in computer hardware and software was \$36,000, \$10,000 of which is spent on software.

Accounting: A Critical Small Business Solution

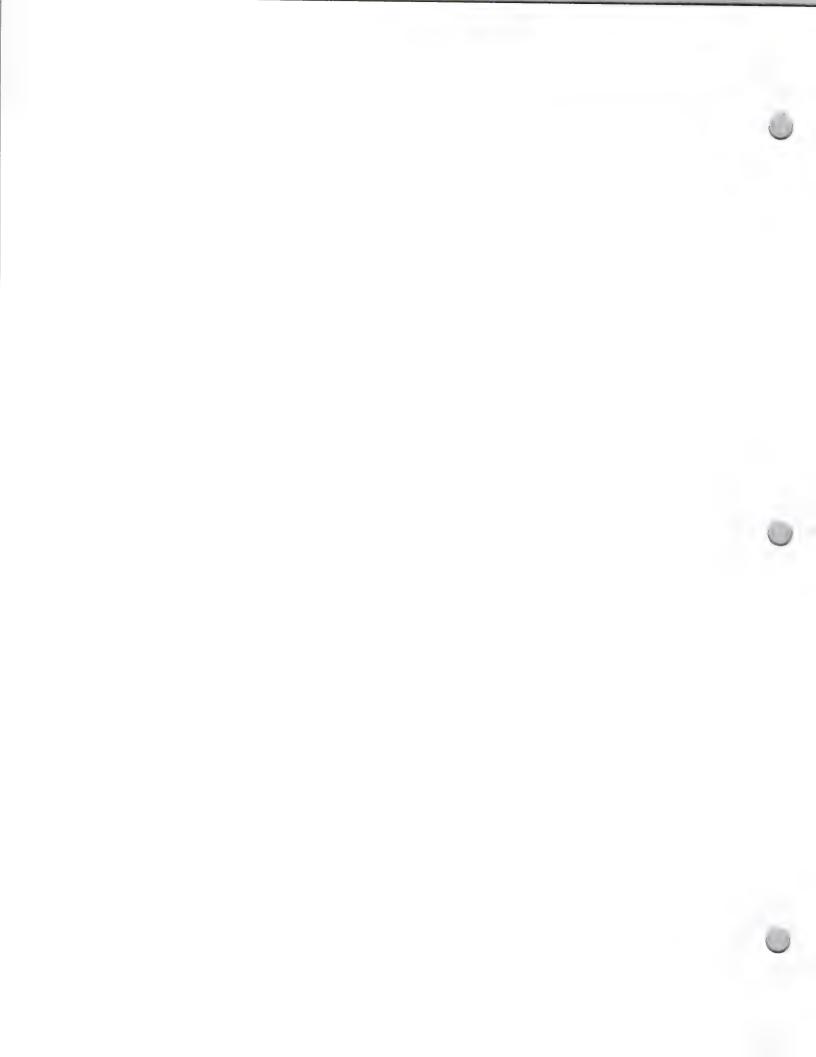
Although small businesses use a broad range of applications, accounting is the single function most frequently performed by those businesses on a computer. Every small business is required to perform accounting somehow. In fact, the primary market for microcomputer-based accounting software is among small to medium-size businesses. Research indicates that 2 million units of microcomputer accounting software were sold in 1986. And the demand for these applications is growing; sales of 2.8 million units are forecast for 1990. The market demand is likely to be strong for flexible, full-featured, multiuser accounting software that offers a wide range of accounting functions and an easy-to-use interface.

There is a particularly great opportunity for accounting software that allows the user to do more than just accumulate numbers. An accounting system that can serve as an "executive information system" or business management tool has much greater value to the business owner, who is generally the decisionmaker for this type of system purchase.

The graphics capability of the Macintosh has enabled some developers to start to offer better business analysis within accounting programs. The graphic interface also offers another opportunity; input and output screens on the Macintosh can be made to look like familiar page forms, thus allowing the businessperson to customize the screens. This eases the learning curve of the accounting system. Features like this serve as incentives for dealers to promote a particular package over another.

Important Accounting Functions

- General Accounting Needs: Most businesses need general accounting functions, which include general ledger, accounts receivable, and accounts payable. Payroll is a function that many small businesses choose to automate, though payroll service bureaus remain a cost-effective option for a large number of these businesses.
- Service Industry Needs: The Macintosh computer has become an integral part of many businesses in the service sector. Among service industries, there is a great need for flexible time- and-billing packages that integrate with a company's general accounting system. These businesses can also benefit from job-cost modules, which allow them to estimate costs associated with a project and track and analyze costs as incurred.





Small Business/Accounting

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- Needs of Manufacturers/Distributors: Inventory, order entry, and purchase order modules are important for many manufacturers and distributors. Multiuser capability is often critical in these industries, where the warehouse and the accounting office need simultaneous access to up-to-date inventory and accounting information.
- Vertical Market Needs: Many vertical markets have specific needs that may not be best met by a basic accounting package. If you choose to target a particular vertical market, it is important to develop a product that fits that market's unique needs and to market directly to your target customers. When designing applications for a vertical market, it is important to work with people who are experts in the specific requirements of that market.

Recommended Compatibility

We strongly recommend that your small business accounting products be compatible with the following business configurations:

- Macintosh® Plus, Macintosh SE, or Macintosh II personal computers
- Hard Disk 20SC (minimum)
- ImageWriter® LQ, ImageWriter II, LaserWriter®, or LaserWriter Plus printers
- Apple Tape Backup 40SC
- AppleShareTM file-server system

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The purpose of this note is to provide developers with some guidelines for home market software based on Apple's own experience and marketing directions. Please do not interpret the following recommendations as restrictions—innovation remains the lifeblood of this industry.

General Principles

The Value of Standards: Uniqueness is a virtue in product features, but not in certain elements of product design, including:

- Interface—Apple's research into human interface issues is summarized in the Apple Human Interface Guidelines, which you should read. Whether you use an Apple standard interface or not, the guidelines contain a wealth of useful information regarding principles of interface design, which applies across the board.
- Programming Conventions—If future compatibility is important to you, please observe all programming do's and don'ts set down by the Technical Support Group.
- File Formats—Incorporating support for both Apple and third party file formats into your products will increase their value to consumers.

Installed Base vs. New Technology: When Apple introduces new CPUs and peripherals, it creates a tradeoff for developers: Do you support the new features or maintain compatibility with the installed base? There are several factors that weigh the decision toward showcasing the latest technology:

- Recent computer buyers purchase software at a higher rate than the installed base.
- Using the latest hardware features enhances the quality and salability of your product.
- New computers open new markets and create demand for products that take advantage of their specific features.
- Apple's marketing is geared toward promoting products that highlight our innovations.

Scheduling Quality: Every developer wants to ship the highest-quality product possible. But often, the definition of quality is limited to eliminating bugs. While this is critical, the consumer's perception of the product encompasses everything from package design to the layout of the manual. Assessing these factors requires a program of end-user testing as described in Apple's Human Interface Guidelines. Build time into your development schedule for such a program—testers are more forgiving than the marketplace.

Plan for Upgrades: Because of changing customer desires, freshly discovered bugs, and new hardware configurations, every product needs constant revision—so plan for it. Incorporate registration cards into your products from day one. Not only do you increase customer loyalty, but you build a valuable list of contacts for marketing programs and product input.

Development Opportunities: There are no magic answers about what makes a successful product, but one element to consider when making design decisions is that consumer purchases are almost always driven by one of two factors: the desire to educate children or to conduct business.





Home Market Development

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Beyond such broad directives, the advent of the Apple IIGSTM opens up a myriad of possibilities. Not only can older Apple[®] II titles be updated with the new interface, but products can be ported over from the MacintoshTM, Amiga, and Atari ST computers. In addition, Apple is particularly interested in promoting software that showcases the graphics and sound capabilities of the IIGs. This includes high-level simulations, creativity products, and products that deal with music education, music composition, and speech.

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February 1, 1988

Developing software for use in higher education is different from developing software for the consumer or business markets, because the requirements of the market are different.

Development Process

What makes higher education software development unique is the need to understand the special concerns of the market. For this reason, the team approach to development is crucial for the success of a higher education product. Only by involving experts (professors, students) from a variety of different schools can you ensure that your application will be appropriate for the academic environment. Following is a possible model for how to involve experts in your development team:

• Project manager—Responsible for coordination, scheduling, and deliverables

 Subject matter expert (SME)—Designs problems and content on paper or using interactive prototype

• Instructional designer (ID)—Takes SME materials and creates screen displays

Programmers—Write code to implement screen displays

• Reviewers—Check SME's and ID's work every few weeks, provide feedback

• Testers—Use software while it is in the beta-test stage (students and teachers)

Generally, it is best to allow each member to focus on his or her particular area of expertise. However, all team members should work together and "cross-pollinate," especially in the planning stages.

Suggested Hardware Configurations

At Apple, the MacintoshTM product line is marketed to higher education. We need to provide this market with powerful solutions made possible by the capabilities of the Macintosh, in order to meet faculty and students' needs for speed, graphics, and data communications.

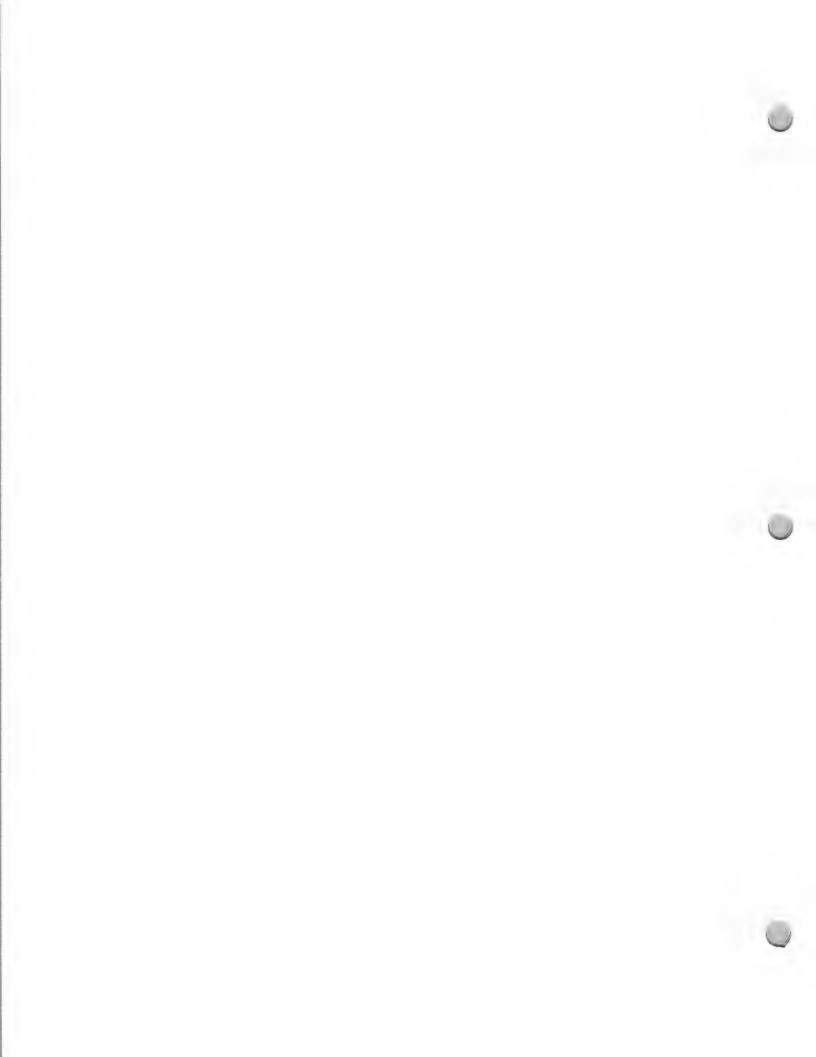
Based on the large installed base of Macintosh computers in the higher education market, we strongly recommend that your products support one of the following configurations:

Macintosh Plus, Macintosh SE, and Macintosh II

- Multifinder
- 800K disks
- Hard disks, no copy protection
- 128k ROM

Application Areas

Apple's Higher Education and Third Party Marketing Groups will consider comarketing activities with companies whose products support the configurations mentioned above and also fit into Apple's promotional focus. This year, the higher education focus is on five areas: freshman composition, computer science, engineering, business, administration and libraries. The Apple marketing groups are also interested in working with library and administrative software developers.





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Once your product is on the market, please send your product information to Apple's Higher Education Marketing Group, Attn: Katie Povejsil (M/S 36L), and to Apple's Third Party Marketing Group, Attn: Kirsten Nelson (M/S 36P).

Some other areas open for development of good curriculum-based products are any of the horizontal "textbooks" courses such as chemistry, physics, calculus, and psychology. The highest class enrollments are in these subject areas, and there is a good opportunity for developers to promote quality products.

Distribution

Keep in mind that the Apple University Consortium schools have many active Macintosh software developers who often seek distribution for their products. Information about their development activities is contained in *Wheels for the Mind*. In addition, Kinko's Academic Courseware Exchange aids in the dissemination of higher-education-developed, precommercial software to the higher education community. For more information about *Wheels for the Mind* or Kinko's Academic Courseware Exchange, refer to the Distribution section in *The Information Exchange*.

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K-12 Development

Product Design and Support

February 1, 1988

As you begin the development of K-12 educational software products compatible with Apple® computers, and wonder how you might be considered for comarketing activities with Apple, the following information may be of interest to you.

Apple's marketing and evangelism groups have focused on promoting third party software solutions to help sell Apple hardware, in particular products that adhere to the hardware configurations that are listed below. Apple's K-12 marketing and sales organization has already promoted a program targeted at educators, called "Apple Upgrades Education," to gain support for these configurations.

If your products have the following hardware configuration features, there is no guarantee that you will be considered for Apple comarketing; however, if they do not have them, your chances are considerably reduced.

Apple IIe

- · Requires 128K
- Supports 80-column display
- Implements the Apple Human Interface Guidelines (either the mouse-based or file-card metaphors)
- Supports the ProDOS® 8 or ProDOS 16

Apple IIGS™

- Requires 512K
- Supports 80-column display
- Implements the Apple Human Interface Guidelines (either the mouse-based or file-care metaphors)
- Supports the ProDOS 16 operating
- Takes advantage of color graphics
- Offers sound, either music or voice

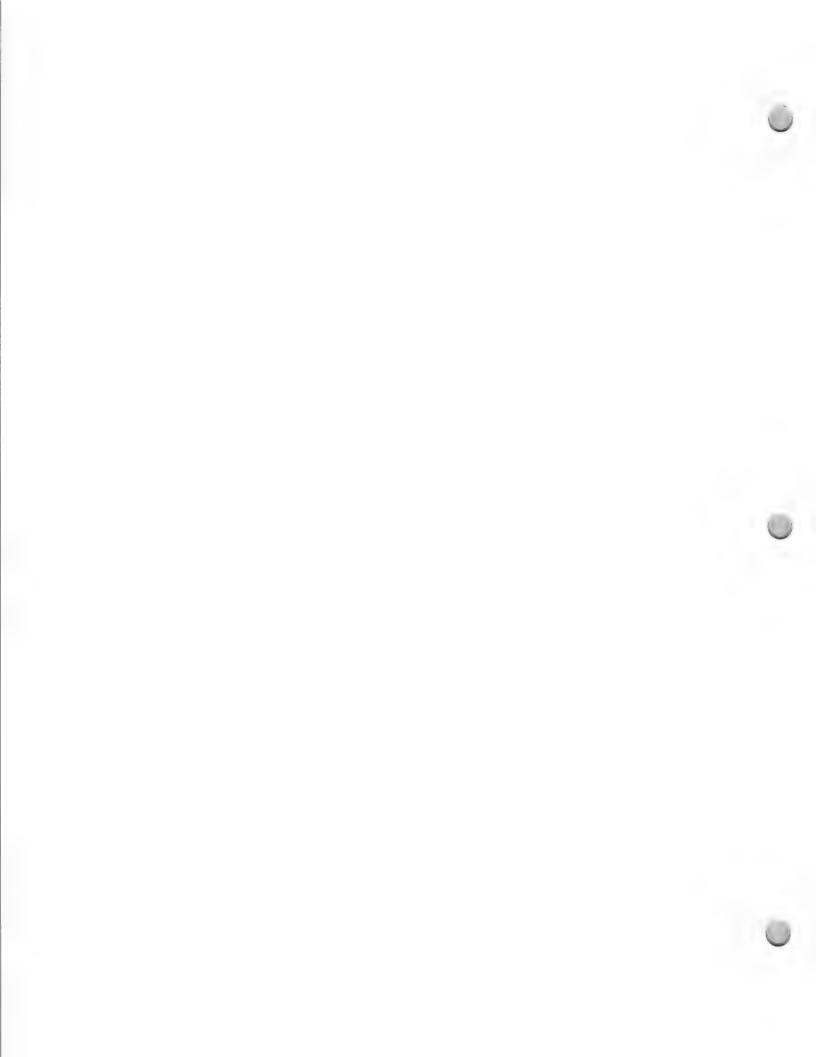
Teachers are rewarded in several ways when they make the decision to upgrade to or purchase these hardware configurations. They benefit from the power of the 128K or 512K, the ease of use of the mouse interface, and the enhanced functionality of the software. Due to the standardization of Apple Human Interface, teachers save a tremendous amount of time training students and themselves to learn software. Because the human interface is consistent, teachers and students don't need to learn a new set of commands each time they receive a software package. Once they have learned the "how" of one package, they are able to use many others.

For Your Information

The Apple Human Interface Guidelines consist of 100 pages of information on human interface and software design. You can obtain the Apple Human Interface Guidelines from the Apple Programmer's and Developer's Association. (Please refer to the APDA note in the Distribution section.)

One important note: Apple cannot support mass-storage devices for the Apple II using any operating system other than ProDOS 8 or ProDOS 16. Therefore, any educational software under development should support ProDOS 8 or ProDOS 16. We strongly recommend that any products that are currently on the market be converted to ProDOS. Check with the Apple II Technical Support and Software Licensing groups to make sure that you are using the correct version of ProDOS. The MCI address for Apple II Technical Support is DTS, and the phone number for Software Licensing is (408) 973-4667.

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AppleShare Development

Product Design and Support

May 1, 1988

This note is intended to familiarize you with the AppleShare® file server, how it benefits the K-12 market and how you, as a developer, can develop for the special features that AppleShare has to offer.

The AppleShare file server lets students use the AppleTalk® network to share information quickly and easily. AppleShare turns a dedicated Macintosh® Plus, Macintosh SE, or Macintosh II with one or more hard disks into a central electronic filing cabinet in which everyone can store documents in various types of folders. By giving each student access to the same documents and applications programs, AppleShare simplifies and speeds up classroom computer use.

System Components of the AppleShare file server

File Server

The AppleShare File Server software has recently been revised. The most significant change is that ProDOS® systems such as the Apple® IIe and Apple IIGS® personal computers can now take advantage of the file-server capabilities. Special ProDOS software for the file server must be loaded onto the server from a 3.5-inch disk at an Apple II workstation. The new software also allows the server's administration program to run concurrently with the server, which means that users can continue to work with server volumes during administrative procedures. In addition, the new version supports user-controlled passwords, allows copy protection to prevent files from being copied from the server, and offers support for CD-ROM drives.

Print Server

AppleShare Print Server software (formerly called LaserShare[™]) runs as a concurrent, foreground server application. With this revision, the software provides print spooling to any LaserWriter® printers on the network and to ImageWriter® printers equipped with an AppleTalk card. Color printing to the ImageWriter printer is also supported. The print server can manage up to five printers simultaneously.

Apple IIe Workstation

When installed in a 128K enhanced Apple IIe computer, the Apple II Workstation Card provides the LocalTalk™ cabling connection for an AppleTalk network. The AppleShare connection enables the workstation to start up without using a local disk drive.

Workstation software accompanies the card on a 3.5-inch disk. The software can be stored on the server. In addition to the LocalTalk port, the card provides a serial port for connection of other devices, such as a local printer or a modem.

Apple IIGS Workstation

Workstation software for the Apple IIGS is provided on a 3.5-inch disk. When a copy of the software is stored on the server, any Apple IIGS workstation connected to the network—with a minimum of 256K RAM—can access the AppleShare file server.





AppleShare Development

Product Design and Support

May 1, 1988

Aristotle Menu Software

Aristotle[™] menu software was especially designed for schools. Its menu-display and menu-management programs provide Apple II computer users with a streamlined method for starting up ProDOS applications from an AppleShare file server. The network administrator selects applications on the server for each student or group, and then places these applications in a menu. For example, a menu for an English class might include a word processing application, a database manager, and some database files containing information on literature. When students log on to the server, they see the menu and can easily select the application they need. Apple II workstation users not using Aristotle must start up applications from the server by entering the ProDOS pathnames.

What does an expanded AppleShare mean for developers?

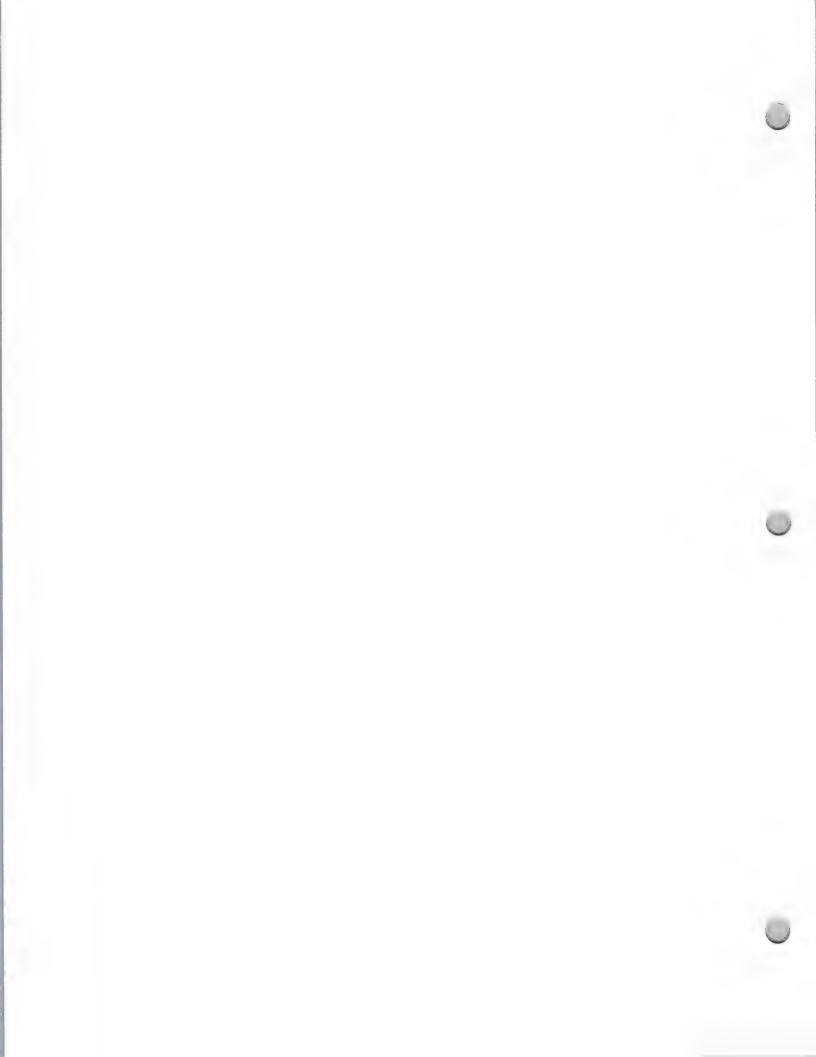
K-12 developers have three major opportunities in the AppleShare area:

- Developing ProDOS software that takes advantage of networks, such as electronic-mail and bulletin board programs, as well as multiuser database managers that students can use to collect and share their own data.
- Developing large-scale ProDOS applications, such as classroom-management systems or large multiuser applications that need to reside on a hard disk.
- Marketing existing products. With AppleTalk networks providing a way to share the cost of a specific piece of hardware or software among several users, schools are likely to buy more products.

Programming Guidelines for "AppleShare Aware" ProDOS Applications

If you want to make your ProDOS applications work on the AppleShare file server, follow these guidelines as you design or modify your programs. (Note: This list is adapted from the technical notes for the network, which will be available soon from the APDA $^{\text{m}}$.)

- Make sure to use the machine language interface (MLI) entry points for making calls to ProDOS.
- Do not hard code pathnames, directory names, volume names, or their slot and drive location.
- Use the ProDOS READ call and WRITE call rather than the READ_BLOCK call and WRITE_BLOCK call.
- Provide unique file names for temporary files.
- Avoid program overlays wherever possible.
- Do not mask out interrupts.





AppleShare Development

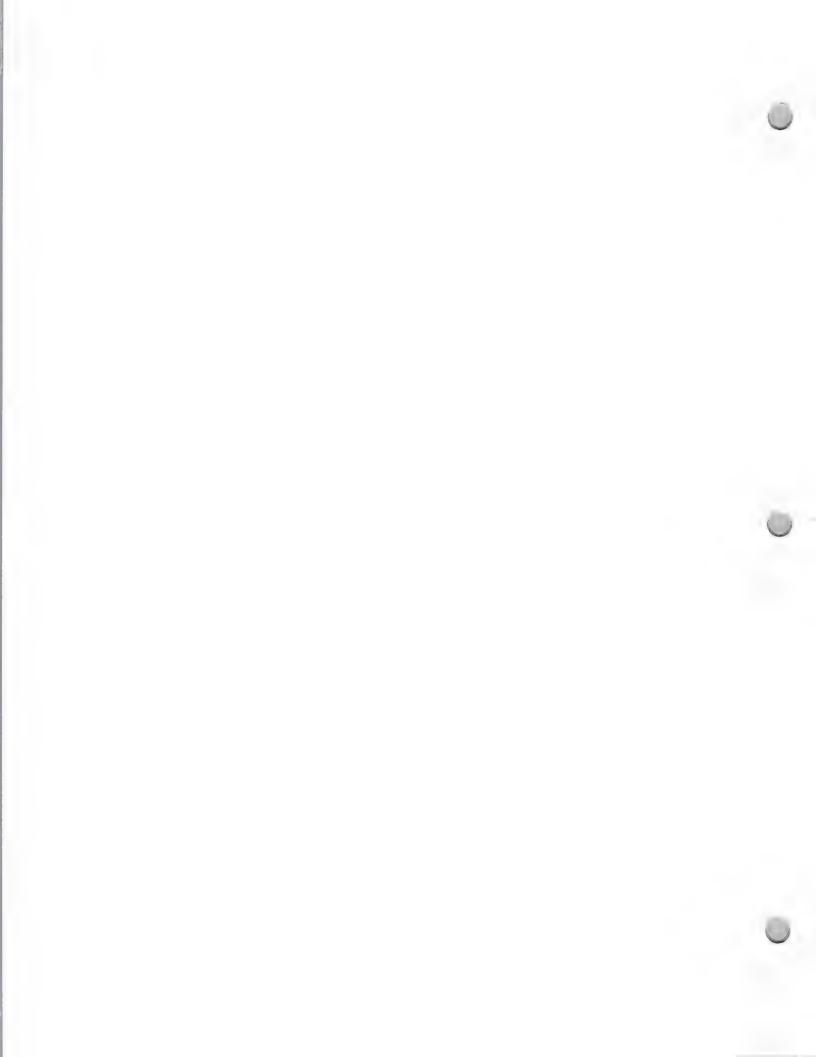
Product Design and Support

May 1, 1988

For more specific information about developing or modifying applications to run on an AppleShare network, contact:

Shirley Stas
Apple Computer, Inc.
20525 Mariani Avenue, M/S 51AB
Cupertino, CA 95104
(408) 973-4212
or AppleLink®: STAS

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Product Design and Support

October 1, 1988

Getting Started Developing for the Macintosh

The Macintosh® personal computer is like nothing you've ever programmed, so get ready for lots of reading and experimenting. There are a few key services, tools, and publications that can help you throughout your development efforts on the Macintosh, making your programming easier and more productive.

Fundamental Resources

Electronic Mail Service

Electronic mail is the only way for Certified Developers to get technical support from the Developer Technical Support group. Most groups within Apple® that deal with developers have both an AppleLink® and an MCI address for developer questions and suggestions; choose the service that's most appropriate for you (please refer to the AppleLink Program and MCI Mail notes in the General Information section).

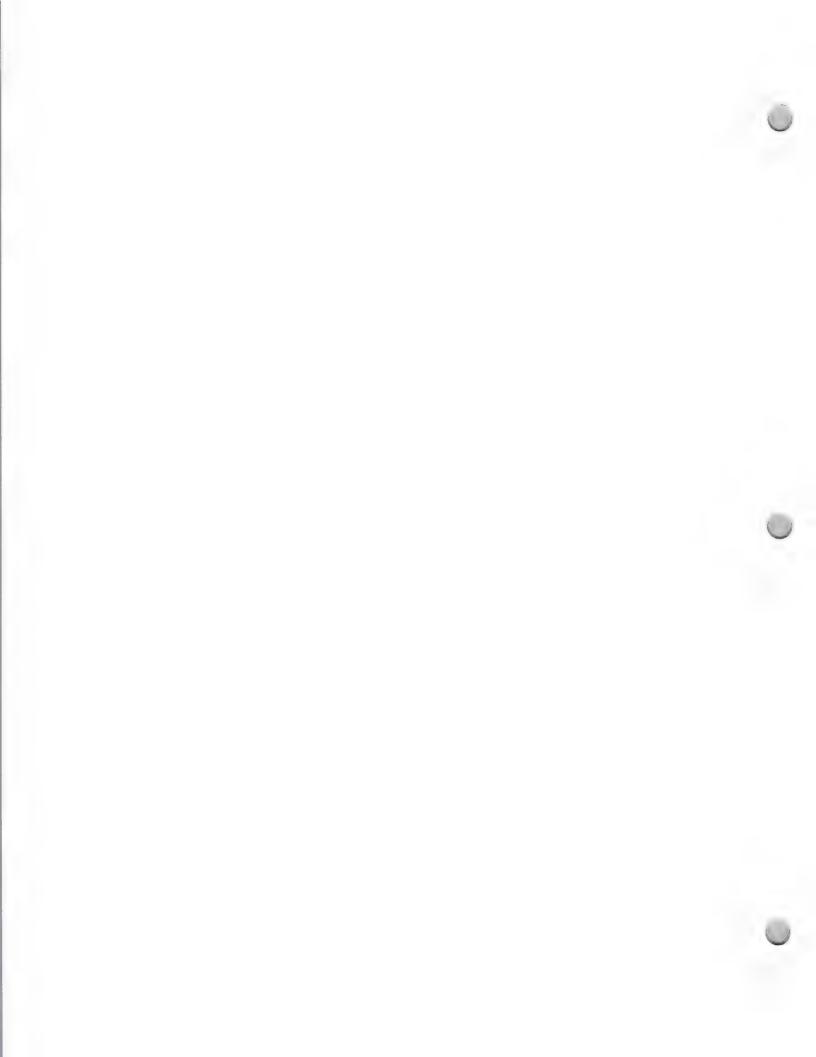
Apple Programmer's and Developer's Association (APDA) membership
APDA is committed to providing up-to-date technical documentation and example programs to
developers who become members. To this end, the group sells pre-release Apple technical
documentation and development systems (as well as Apple and third-party products that are final).
This allows serious developers to get started working with new technology before it is completed or
completely documented. APDA is the only place developers can get this information prior to its final
release. To make sure you always have the most recent version of such information, investigate
APDA's automatic ordering mechanism. (Please refer to the note on APDA in the Distribution
section.)

Technical documentation

Inside Macintosh is the technical reference manual for the Macintosh; it's virtually impossible to bring a Macintosh product to market without it. Inside Macintosh details what's in the Macintosh ROM, and what it allows you to do. At this writing, Inside Macintosh volumes I—IV are available in final form. Inside Macintosh, Volume V is a delta guide that updates the first four volumes to include the Macintosh SE and Macintosh II. It documents both enhancements and alterations to existing systems software (the Resource manager and Text Edit, for example) and totally new software (like the Color and Script Managers). It also covers such important topics as keeping software compatible across current and future Macintosh products, adapting to international markets and non-Roman scripts (Arabic and Korean, among others), designing software to use color and be independent of a given display resolution, and using files in a shared (networked) environment.

Script Manager Developer's Package is another document available from APDA that provides information to help you better develop worldwide products. This publication includes information on the Script Manager which provides a set of routines to handle text in both Roman and non-Roman (Japanese, Chinese, Arabic, or Hebrew) languages.

Macintosh Technical Notes are detailed technical documentation written by the Macintosh Developer Technical Support group to expand upon and clarify Apple technical documentation. The notes also document bugs in Apple software, hardware, and documentation. Technical notes address questions





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commonly asked by developers, so reading them now may save you time and exasperation later. Current technical notes are issued in the monthly Certified Developer mailings, and back issues are available through APDA.

Technical Introduction to the Macintosh Family is a one-stop source for an overview of the Macintosh hardware, its internal workings, and options it makes available. The book includes separate chapters on the Macintosh ROM, the user interface, the internal workings of Macintosh graphics, system software (the Finder, MultiFinder, the System file, and desk accessories), memory management, the Macintosh file and operating systems, and a high–level explanation of each machine's major hardware subsystems.

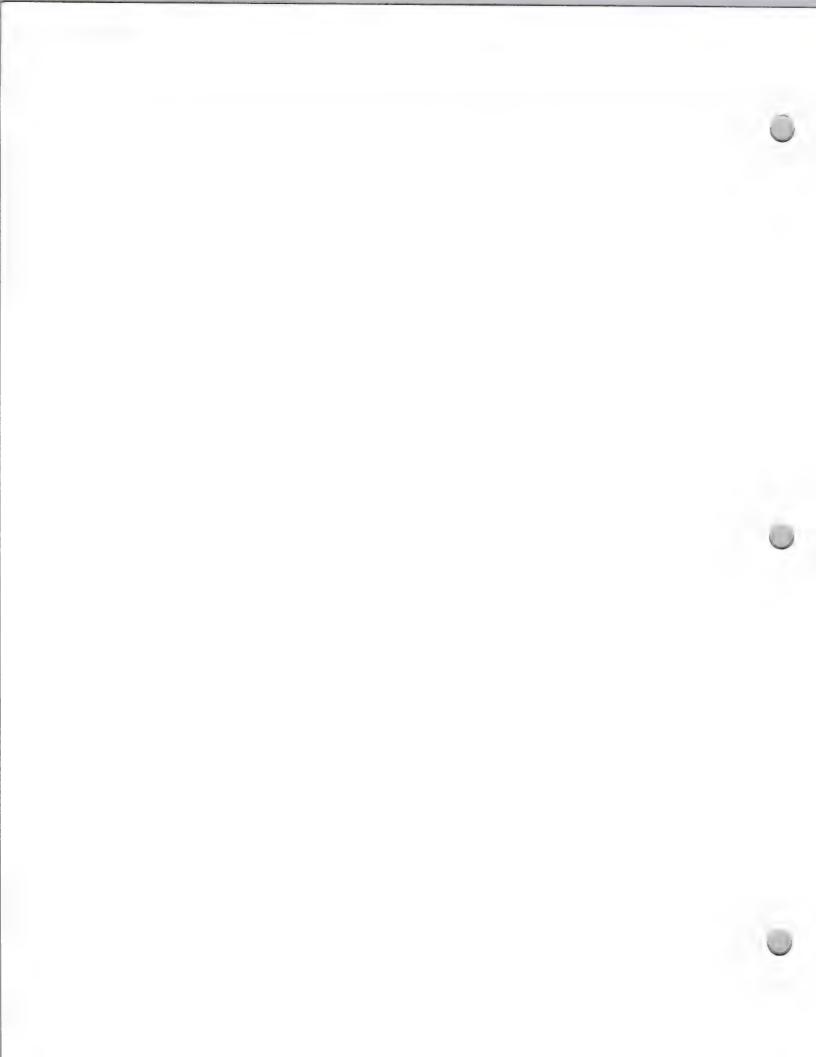
Programmer's Introduction to the Macintosh Family is a companion volume to the Technical Introduction book and the next level of detail for a developer or interested user. Written for a reader who has some familiarity with programming, this book shows how a Macintosh program works and gives an overview of what you need to know to write new programs. It goes beyond the first book in discussing technical details more deeply, naming specific routines and how to use them, and describing common problems and their solutions. It lists numerous techniques and "rules of thumb" generally known to be good practice but, until now, not formally collected. Also, Appendix B, "Important Operating System and Toolbox Calls," briefly describes 135 commonly—used calls, allowing you to concentrate on learning only the calls you're most likely to use. The book's overview nature helps you quickly understand the structure of Macintosh applications, leaving you to use Inside Macintosh only when you need it for detailed information.

The Macintosh Family Hardware Reference Manual is a reference to Macintosh Plus, Macintosh SE, and Macintosh II hardware. The information presented in this manual is critical for hardware developers and useful for educational purposes to software developers. However, software developers should not rely on the detailed hardware information in this document, because if they do, they may have serious software compatibility problems in the future. At this writing, the Macintosh Family Hardware Reference Manual is available through APDA in "final APDA draft" form only; it should be available in its final form in 1988.

The Macintosh II and Macintosh SE Cards and Drivers Manual contains information on developing NuBus cards and drivers. At this writing, the Macintosh II and Macintosh SE Cards and Drivers Manual is available through APDA in draft form only; it should be available in its final form in 1988.

Software Applications in a Shared Environment is a document that details the considerations involved in developing software that will function in a shared environment (such as an AppleShareTM volume). It discusses proper treatment of and open permissions for documents, byte range locking to allow concurrent writers to the same document, and the architecture needed to allow application sharing. It's available through APDA.

There's a lot more Apple documentation that addresses issues from the AppleTalk® Network System to user interface. For more detailed information about what's available, check the APDA catalog and local technical bookstores. In addition, example code products from APDA may be helpful in learning to use Macintosh ROM routines. These are generally not intended as examples of programming style, but rather as "quick and dirty" examples of how to use the Macintosh Toolbox





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Human Interface Guidelines

The distinctive Apple human interface (as implemented on both the Macintosh and the Apple II family of computers) makes them easy to use and keeps the user manuals short. However, underneath the interface (which looks simple) lie a large number of details and philosophical decisions that take an amazingly long time to describe. Human Interface Guidelines: The Apple Desktop Interface is the first book to comprehensively specify this interface. In 144 pages, it describes the intangible "feel" and structure of an application and specifies the appearance and behavior of each of its elements — everything from icons and windows to hierarchical menus and intelligent cut-and-paste text operations. As with the two Introduction books, this book collects much previously known information into one location. If you are a software developer, you should study this book and follow its advice. Even if you are not, you will find it interesting and useful.

A Development System

The Developer Tools group has created a guide to provide developers with a list of development languages and tools. This guide is called *Apple II and Macintosh Development Software: A Guide to Languages and Tools*. The information in this guide has been furnished by the authors and/or publishers of the products described, and it should help you decide on which development system is right for you. You should have received a copy of the guide in your Certified Developer application packet. If you do not have one, contact the Developer Tools group, at (408) 973-6525. (Please refer to the Languages and Tools note in the Distribution section.) It is also available from APDA.

Suggested Resources

A Debugger

After you've gotten familiar with the Macintosh and how it works, find yourself a debugger. A good debugger can save an experienced Macintosh programmer many frustrating hours of guesswork. Because it requires knowledge of both 68000 assembler and the Macintosh, you probably won't be able to use a debugger when you're just starting out, but you should be using a debugger by the time you're finishing up your product.

Other Supplementary Resources

Technical books

There are many good third-party books about Macintosh. Your local technical bookstore may have some helpful publications, or you may also find something to meet your needs in the APDA catalog.

Apple User Groups

User groups can provide a wealth of information, from power-user shortcuts to example code libraries. To get a list of user groups in your area, call 800-538-9696, ext. 500. Some user groups run bulletin-board services that are tailored to the needs of their members. Contact the user groups directly for more information about the services they provide.

Bulletin board services

Bulletin-board service interest groups can provide a wealth of programming information. For more





Product Design and Support

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information, contact them directly. Examples of commercial bulletin-board services with active Macintosh interest groups are GEnie, Delphi, and CompuServe.

Developer Services Bulletin Board

The Developer Technical Support group has several read—only folders in the Developer Services bulletin board on AppleLink. These folders contain all of the Macintosh technical notes, some example code, useful interfaces, international keyboard illustrations, some development tools (such as Macsbug and ResEdit), and many more useful resources.

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Apple Development Tools

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One of the most important choices you'll make when developing on an Apple® II computer is which development system to use. Knowing more about some of the key tools and technical references that are available will help make your development process easier and more productive. We advise that you use one of the tools described below, available through the Apple Programmer's and Developer's Association, and the list of technical manuals at the end of this note.

ProDOS Environment

· ProDOS 8 Assembly Tools

Included are four programming tools—editor, assembler, bugbyter debugger, and a relocating loader—that will help a programmer create, debug, and execute assembler programs for any Apple II computer. Resulting applications run in the ProDOS® environment. Requires an Apple II system with at least 64K of RAM.

ProDOS 8 Version 1.4 Upgrade

The Update describes the principal changes to ProDOS 8 since version 1.1.1. It addresses features visible to the user or of interest to the programmer. Features that apply to ProDOS 8 running on the Apple IIGS® are noted. It contains 22 pages of documentation and two disks (one 5.25-inch and one 3.5-inch) that contain the kernel.

Pascal Environment

Apple II Pascal 1.3

Apple II Pascal provides an alternative applications environment. It provides an outstanding development system, but, because it is not ProDOS based, it does not always provide full compatibility with peripheral products such as large-volume hard disks.

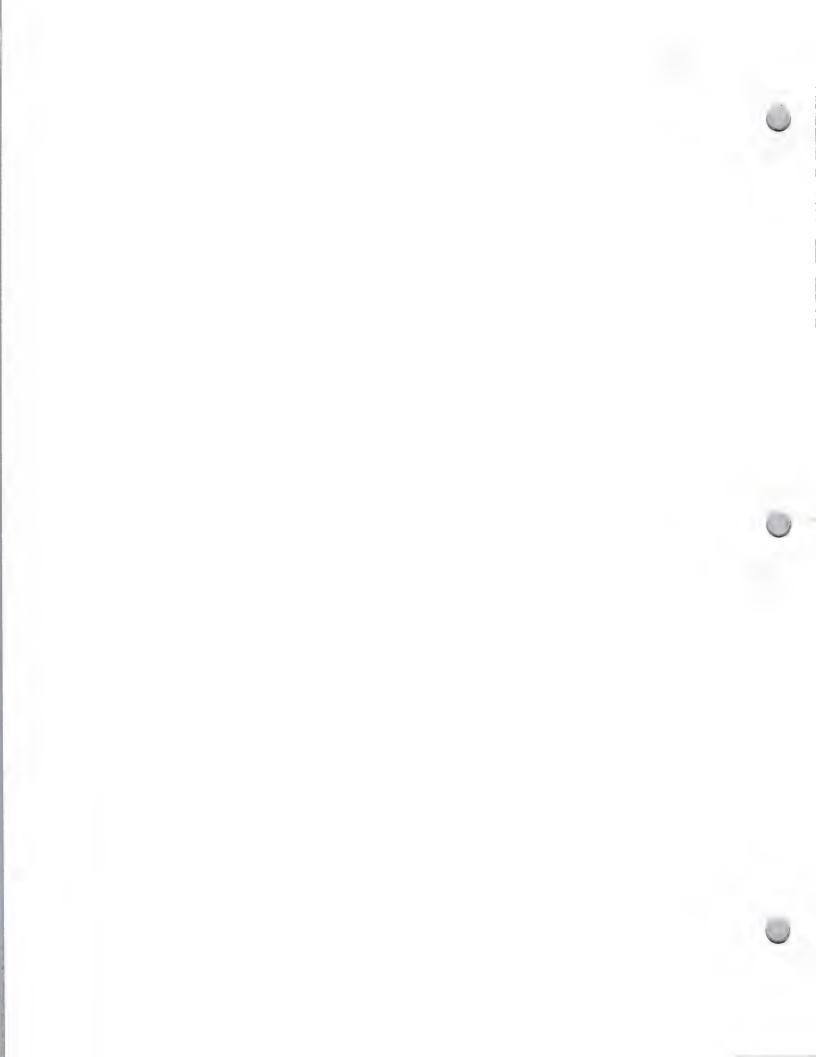
This is Apple's classic implementation of the UCSD p-system for the Apple II family. It provides a complete development and operating environment supporting the Pascal language. It includes a Pascal compiler, linker, filer (file-management utility), editor 6502 assembler, p-code interpreter, and sample programs. The compiler generates p-code files that are executed by the interpreter. Different versions of the interpreter are provided for 64K systems (the Apple II and II Plus) and for 128K Apple IIe and IIc computers. It is also compatible with the Apple IIGS.

Assembly Language

Apple Programmer's Workshop (APW)

This is Apple's native development system for the Apple IIGS. As a complete development system, it includes a command shell, linker, and utilities. It is the host for other APW language products such as APW C and several third-party language products. It includes a complete 65816 macro assembler. The command shell performs functions such as file management, directory listing, I/O redirection, and pipelining. The shell environment also provides utility programs with useful extensions to ProDOS 16. The full-screen text editor copies, moves, and deletes blocks; searches and replaces; and executes editor command macros.

The assembler produces 65816 programs that assemble to relocatable object modules. Utility macros to aid programming are provided, as well as tool interface macros; you may also create your own macros and library files. The linker takes files created by the assembler, C, or other compatible language and generates load files, resolving external references and creating relocation dictionaries.





Apple Development Tools

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Various utility programs round out the package; these include "crunch" to combine object files into one file, DumpObj, disk initialization, macro file generation, ProDOS 8 binary file creation, file search directory/file compare, canonical spelling, and library creation. Up-to-date tool interfaces are included. Requires 1.25MB RAM (motherboard memory + 1MB expansion RAM), two 3.5-inch disk drives, and a hard disk. The package contains two 3.5-inch Apple II disks, and over 600 pages of documentation.

Apple IIGS Programmer's Workshop C

This full Kernighan and Ritchie implementation of C generates APW object files. It has extensions that include void types, enumerated types, and structure-passing. It supports source-level segmentation of load files and includes standard C I/O library and Apple IIGS tool interfaces.

Requires APW version 1.0B4 (will not work with earlier versions of APW). Requires 1.25MB RAM (motherboard memory + 1MB expansion RAM) and two 3.5-inch disk drives or one 3.5-inch disk drive and a hard disk. (Hard disk is highly recommended.)

Apple IIGS System Disk 3.1

This is the September 1987 version of the Apple IIGS system software; it includes the new FinderTM (replaces Apple II DeskTop) and a new version of System Utilities that provides faster and easier file/disk copy. It contains the most up-to-date version of all tools. The Finder requires 512K of RAM. The package contains one 3.5-inch disk and extensive release notes documenting new tool calls not found in current releases of the *Apple IIGS Toolbox Reference*.

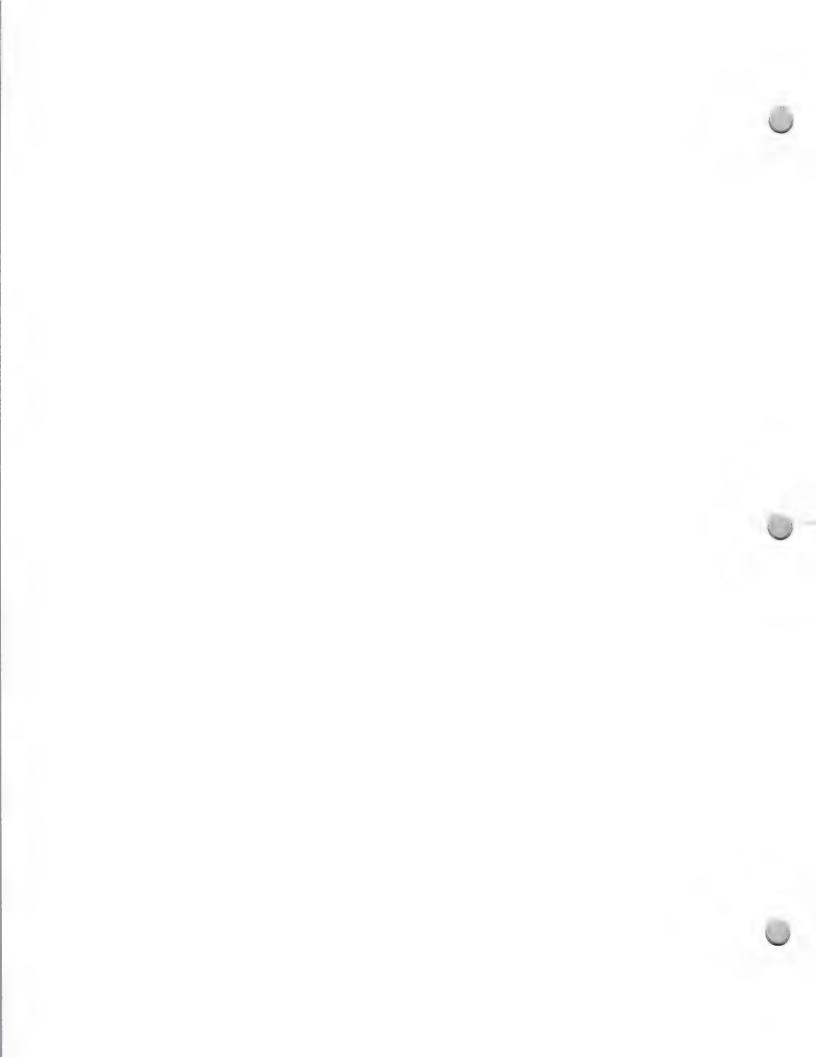
Documentation/Technical Reference Guides

Apple II Technical Notes

This includes detailed technical documentation written by the Apple II Developer Technical Support group to expand and clarify Apple technical documentation. The notes also document bugs in Apple software, hardware, and documentation. Technical notes address specific questions commonly asked by developers. Currently, notes are issued bimonthly in the Certified Developer mailings; back issues are available through APDA in both hard copy and disk form.

Addison-Wesley also publishes a full technical library of Apple Computer tutorials and reference manuals for the Apple II product line that may be useful to you. The technical library includes the following publications related to the Apple II:

- Technical Introduction to the Apple IIGS
- Programmer's Introduction to the Apple IIGS
- Apple IIGS Firmware Reference
- Apple IIGS Hardware Reference
- Apple IIGS Toolbox Reference, Volumes I and II
- Apple IIGS ProDOS 16 Reference
- BASIC Programming with ProDOS
- ProDOS Technical Reference Manual





Apple Development Tools

Product Design and Support

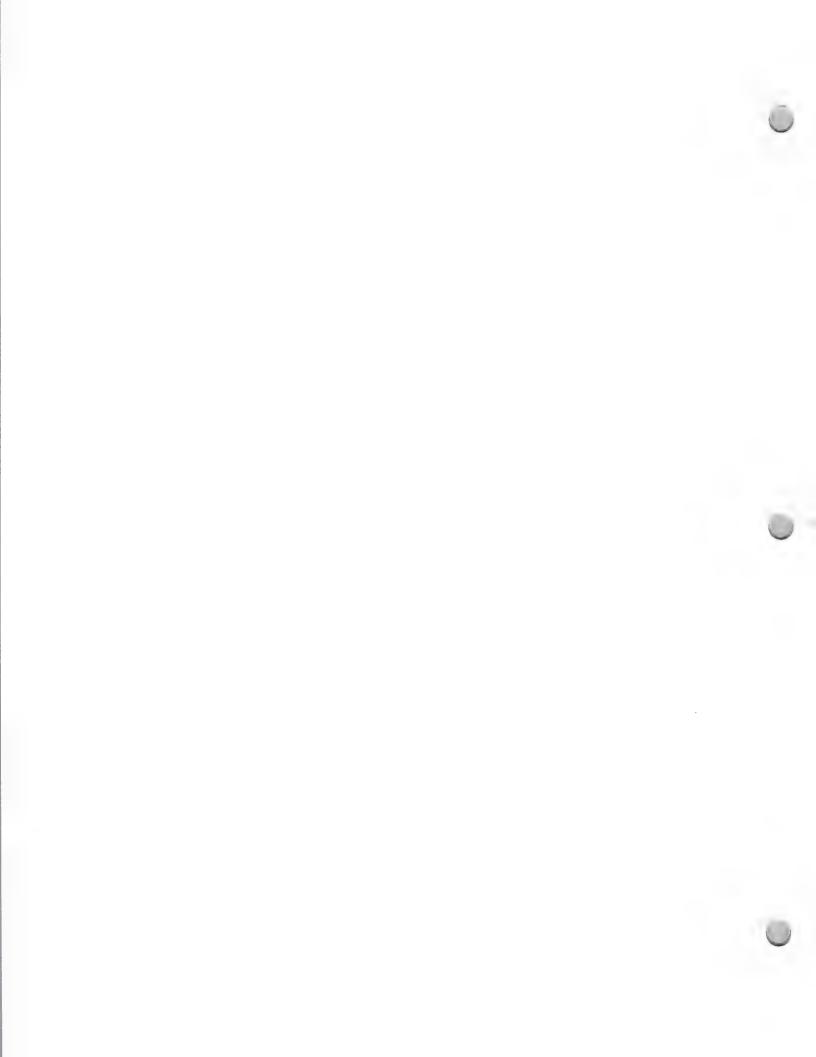
February 1, 1988

- Apple IIc Technical Reference
- Apple IIe Technical Reference
- Apple Numerics Manual

These publications can be found at technical bookstores and B. Dalton Booksellers, and are available directly from Addison-Wesley. To order from Addison-Wesley, contact:

Margo Hurlbut Addison-Wesley Two Jacob Way Reading, MA 01867

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Music Market

Product Design and Support

October 1, 1988

The music market has become very significant to Apple Computer over the past year. In 1988, Apple plans to promote more music solutions than ever before. This note is meant to inform you about the direction Apple is taking in this market. With the introduction of the Apple MIDI Interface, and the market plans that are underway, we anticipate that there will be many development and market opportunities for Apple and for you.

The Apple MIDI Interface

MIDI stands for Musical Instrument Digital Interface; it's an established communications protocol set up by the International MIDI Committee. The Apple MIDI Interface is Apple's first entry-level product in the world of computer-controlled music. It allows Macintosh® and Apple IIGS® computers to connect to MIDI-equipped instruments. In other words, the MIDI Interface is to musical instruments what the AppleTalk® box is to the LaserWriter® printer.

The advantages of the Apple MIDI Interface are that it is easy to connect (it does not require external power supplies), it is extremely small compared to other interfaces, and all cables required for connecting a MIDI-equipped musical instrument to a computer are provided.

Music Market Overview

The musical-instrument industry is growing at a rapid pace. In 1984, \$193 million was spent on 530,000 electronic-keyboard units; by 1986, that number increased to \$526 million. In 1984, \$136 million was spent on 137,000 synthesizers, compared to the \$275 million spent on 350,000 synthesizers in 1986. Overall, sales of electronic instruments reached as much as \$1.35 billion in 1986.

There are several significant segments of the music market. There are approximately 26 million amateurs who enjoy musical instruments, over 650,000 professional musicians, and over 10,000 professional recording studios. Also, the music-publishing industry is a \$300 million-a-year business.

In education, 93 percent of all high schools in the United States offer music classes, with an enrollment of 3 million students annually.

Development Opportunities

Apple evangelists are working with developers of the best music software to make that software available on the Apple IIGS, Macintosh II, Macintosh SE, and Macintosh Plus computers. Apple is also working with other developers to bring new Apple-compatible software and hardware music products to market.





Music Market

Product Design and Support

October 1, 1988

Apple IIGS

Since its introduction, the Apple IIGS has had an important place in the home market. Consumers have recognized the benefits of computers for home education, and this recognition has opened a large window of opportunity for the development of new instructional software for the home.

Apple is looking for music education products that teach users to play the keyboard and to understand note reading and theory as well as composition. The products should make learning music fun and creative. The computer should be seen as an enhancement to the music education process—as a private music tutor with boundless patience. The product should include:

- Full use of the Apple IIGS interface
- Mouse support
- MIDI in and out
- Ensoniq sound chip

In addition to music education software, there is a need for good-entry level sequencers and music-publishing products (for sheet music).

Macintosh Plus, Macintosh SE, and Macintosh II

The Macintosh is the "business machine for people whose business is music." The Macintosh Plus is the entry-level machine for both professional and serious amateur musicians. The Macintosh SE provides hard-disk portability. The Macintosh II is the machine for high-end audio-video recording and editing facilities, and for very high-end music applications. Needed applications are:

- Sequencers
- Sound libraries or samplers
- Composers
- Music-publishing output or transcribers
- Performing tools

Minimum Hardware Development Configurations

Apple IIGS

- Apple IIGS (256K)
- Monitor
- Two Apple 3.5 Drives
- Apple MIDI Interface

Macintosh Plus

- Macintosh Plus (minimum 512K)
- One Apple 3.5 Drive or 20MB SCSI Hard Disk
- Apple MIDI Interface





Music Market

Product Design and Support

October 1, 1988

Minimum Hardware Development Configurations, continued:

Macintosh SE

- Macintosh SE Hard Disk 20 CPU
- Apple MIDI Interface

Macintosh II

- Macintosh II CPU
- Monitor
- Apple MIDI Interface

Marketing Activities

The Consumer Market group plans to promote and communicate about the current Apple IIGS and Macintosh product families through the following marketing and sales programs:

- · Music demo kits for authorized Apple dealers
- Collateral and merchandising materials for dealers
- Programs targeted at Apple dealers and music dealers
- Extensive advertising in major music publications

For More Information...

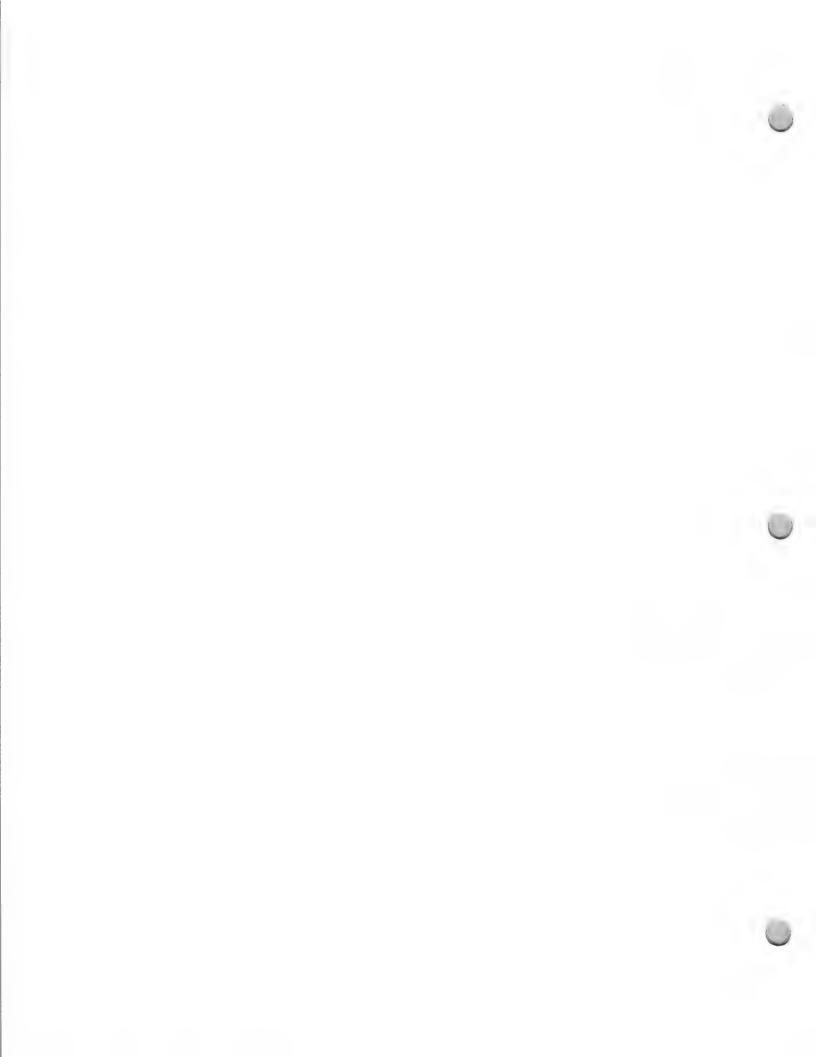
If you are interested in developing applications that take advantage of the Apple MIDI Interface, or would like more information about the music market, call the Developer Programs hotline, or write to the following address, and you will be directed to either an Apple evangelist or a marketing person.

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51W Cupertino, CA 95014 Attn.: Developer Programs

Developer Programs Hotline: (408) 973-4897

AppleLink®: DEVSERVICES

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Macintosh Packaging Tips

Product Design and Support

October 1, 1988

The following helpful hints about packaging were obtained through informal discussions with members of the Apple Creative Services packaging design team.

Suggested Guidelines

- Use a screen shot on the package. It shows off the Macintosh™ user interface, how easy it is to use, and how it will look on your screen. This is a good way to illustrate the features of your software. Studies show that the customer is interested in what appears on the screen. It might even be a good idea to try to put the screen shot on the spine of the package, so that it's visible while the software is on the retailer's shelf.
- There should be a brief description on the front of the package toward the top: one or two sentences, in 18 to 24 point type.
- A depiction of a hand holding a mouse is an easy way to subtly convey the concept of ease of
 use.
- If your product is a business product, keep the packaging businesslike, to distinguish it from entertainment software and to help position the Macintosh as a serious business machine.
- If you plan to take your product overseas, be sure to use generic images which are not specific to a given country or culture, as well as easily localizable text and graphics. Availability of materials on a worldwide basis will make manufacturing easier and more cost effective.

Some Steps to Take

- Go to a software store. Find four great packages and contact the company behind each to find
 out if its packaging was created inside or outside the company. If inside, talk to the design
 department; designers love to talk about their involvement in creating a successful package. If
 the packaging was done by an outside firm, see if the company is willing to release the name of
 its designer.
- Identify a typeface to represent the personality of your company and then be consistent through the packaging and advertising. That typeface becomes "free background music" or an undercurrent "voice" that conveys your company philosophy.

Dos and Don'ts

- Don't use the LaserWriter® and Macintosh fonts for advertising and packaging. That's not what they were meant for, and their resolution isn't high enough for that purpose.
- Think of the front of your package as an quiet room and every graphic piece you add as a noise. Keep the message clear. Don't waste any space with "nonsupportive graphic devices"—they can drown out the message.





Macintosh Packaging Tips

Product Design and Support

October 1, 1988

- · Remember that you have only 15 seconds of your potential customer's time to sell the product.
- Consider your advertising strategy when designing your packaging, so the company message stays consistent.
- Don't use too many dark background colors on the packaging. They don't wear well and often will crack on the folds.
- Consider placing a photo on the back of the package of exactly what it contains, so the customer knows what he or she is getting.

Apple, the Apple logo, and LaserWriter are registered trademarks of Apple Computer, Inc. Macintosh is a trademark of Apple Computer, Inc.





Apple Bug Reports

Product Design and Support

May 1, 1988

Apple Computer would like to be informed of any bugs that Apple developers may find in Apple® hardware or development tools. To do this, we need your assistance. If you find bugs, we encourage you to report them to Apple's Developer Technical Support.

Please provide the following information:

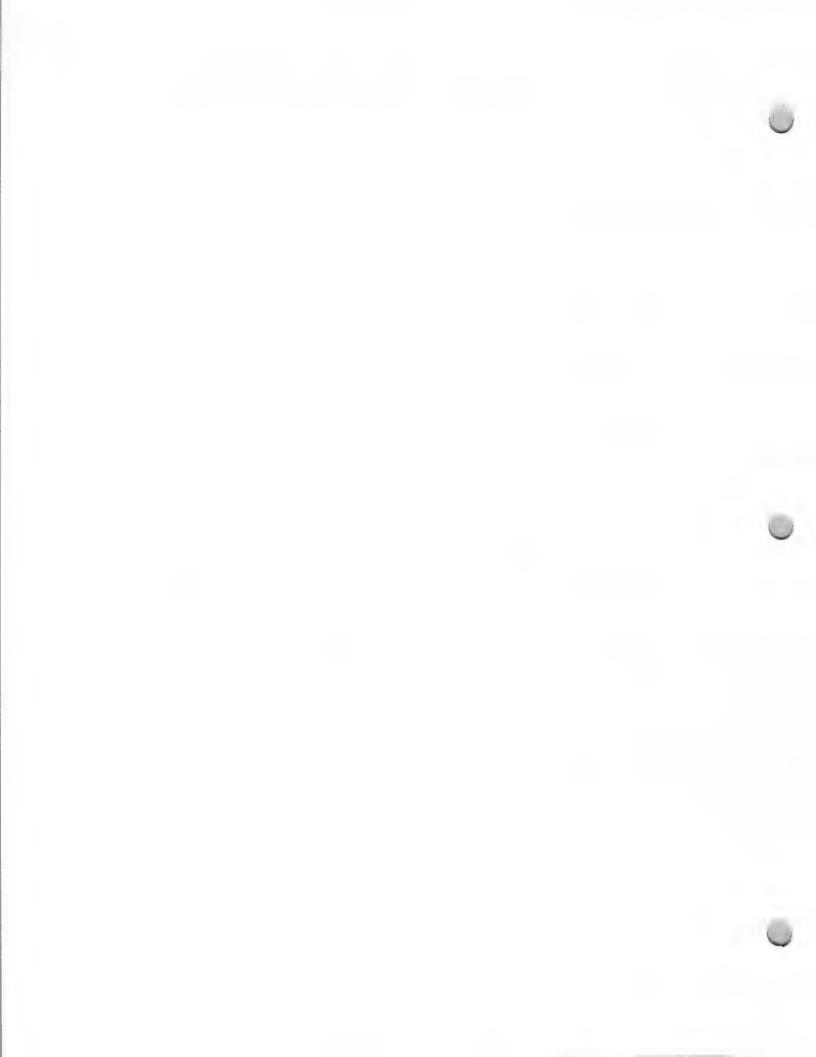
- Hardware and software details be sure to report the specific hardware you are using and the version of the software.
- If the problem i with a development system product, please attach a code listing, screen shots, or any input or output.
- If you are able to offer a possible solution to the problem, please do so.
- Include a brief (one or two sentences) summary of the bug, as well as a step by step detailed description of how to reproduce the problem.

How to Report Bugs:

Please provide the above information in one of these ways:

- AppleLink® Send your report to MACDTS (for Macintosh bugs) or AIIDTS (for Apple II bugs)
- MCI Mail Send your report to MACDTS or AIIDTS
- Disk If you do not have access to AppleLink or MCI Mail, please write to APple's Developer Technical Support group at this address:

Developer Technical Support Apple Computer, Inc. 20525 Mariani Avenue, M/S 51-T Cupertino, CA 95014 Attn.: Bug Reporting





HyperCard Licensing Guidelines

Legal Guidelines

October 1, 1988

The following guidelines are provided by Apple Computer to developers who will license HyperCard® software or create stacks or multimedia programs. Some of this information is Apple policy; some of it is general information about copyrights that we think you will find helpful.

The HyperCard Trademark

"HyperCard" is a registered trademark of Apple Computer that identifies Apple's HyperCard software program. "HyperCard" should receive the "®" symbol on first use in copy. "Stackware" is also an Apple trademark, and should receive the "TM" symbol; it identifies stacks created by Apple. Other HyperCard-related trademarks owned by Apple are HyperTalkTM, HyperStacksTM, and IconMakerTM. The term "stacks" is generic.

Developers may *only* use Apple trademarks such as HyperCard and Stackware to make reference to Apple's programs or to indicate compatibility. For example, you may not label your product "Steve's HyperCard Stackware," but you may label it "Steve's SuperStacks," with a small subtitle, "Compatible with HyperCard® 2.0".

HyperCard Copyrights

HyperCard is a copyrighted software program of Apple Computer, Inc. HyperCard and its accompanying stacks may not be copied, excerpted from, or reproduced by third parties unless the third party obtains either a license from Apple Computer or Apple's written permission (as described below).

Licensing HyperCard

If you are writing a program and plan to redistribute HyperCard with your program, you must obtain a license from Apple's Software Licensing department. The HyperCard License includes the HyperCard software, HyperCard Home stack, Installer software, and Installer script. For more information, contact Apple's Software Licensing department at (408) 973-4667.

Creation of Stacks

If you create a stack without incorporating HyperCard software, you do not need a software license. However, if you incorporate text, icons, or images from Stack Ideas, Art Ideas, or elsewhere within the HyperCard examples, you must obtain express written permission from Apple Computer, Inc. Send a letter with a brief description of the contents of your stack, enclosing screen shots of the material you wish to reproduce, to this address:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 38-I Cupertino, CA 95014 Attn.: Law Dept./HyperCard Permissions

Appropriate credit must be given to Apple Computer for use of this material. Please allow at least two weeks' turnaround time for processing your request.





HyperCard Licensing Guidelines

Legal Guidelines

October 1, 1988

IMPORTANT: Some material in Apple's HyperCard stacks is *not* available for your use. This includes any material with a non-Apple copyright notice on it, and some of the graphics. These unavailable items are listed on the attached exhibit.

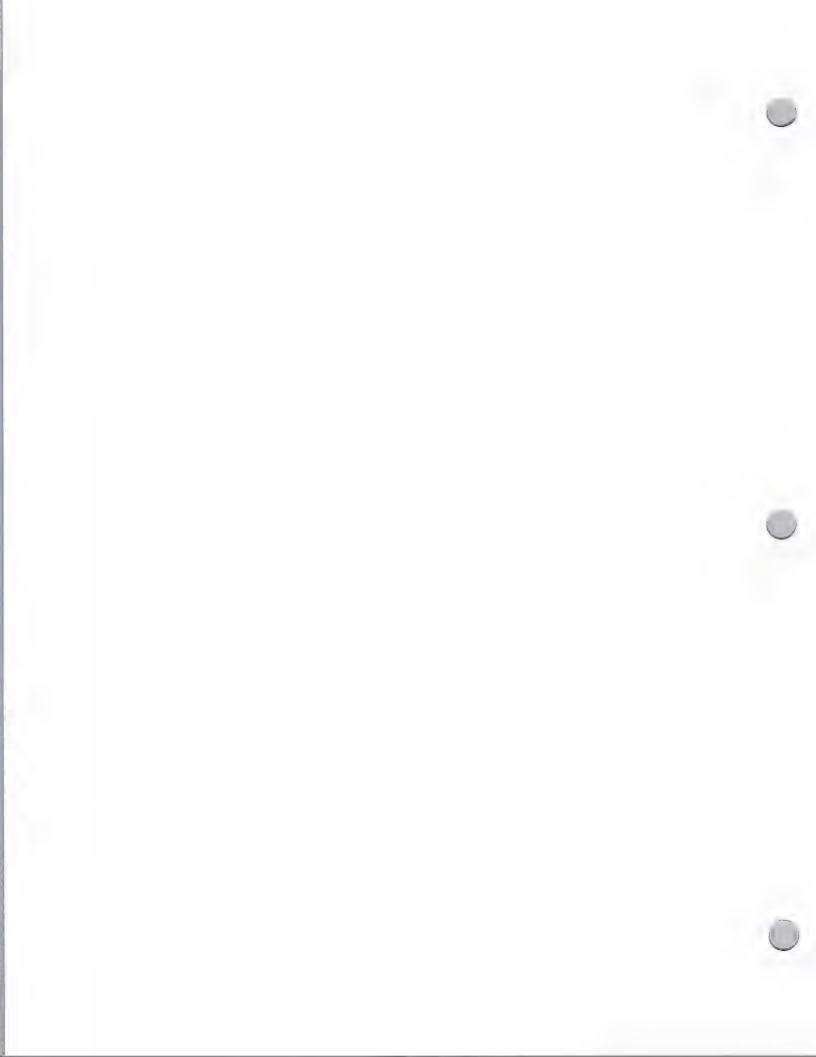
Apple Stacks

Apple has created some HyperCard stacks for training and demonstration, such as the MacworldSM Directory, Fingerspell, and Megacorp. Apple demonstration and training stacks are not in the public domain, nor are they available for license or redistribution. Copies of the Macworld Directory are available through the Apple Programmers and Developers Association.

Multimedia, Music, Videodiscs

If you plan to use HyperCard in multimedia programs, you should be aware of the importance of copyright permissions and licenses. You will usually need written permission from a copyright owner (publisher, author, composer, photographer) before incorporating copyrighted material into your stack or videodisc. Copyright applies to all translations of the material and to use of the material in different media. For example, if you digitize a photograph or use a collection of images in a videodisc, you will need permission from the copyright owner for use of the images. If you record even a few seconds of a popular song, you will need permission or a mechanical reproduction license. Using quotes and text also requires permission.

Copyright on a work normally lasts for the life of the author, plus 50 years; thus, older works may be in the public domain. For example, Beethoven and Mozart themes are in the public domain; so is much of the art and literature from the 19th century or earlier. But most contemporary music, films and videos, photos, characters, and literature are protected by copyright and require written permission or a license for reuse. We encourage you to keep this in mind as you prepare your stacks and multimedia materials, and to consult a legal professional or the U.S. Copyright Office for information and counsel.





HyperCard Licensing Guidelines

Legal Guidelines

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EXHIBIT 1 to HyperCard Licensing Guidelines

Items from "Stack Ideas" and "Art Ideas" That Are Not Available for Reuse

From "Stack Ideas":

"Crab Apple Jelly"—Recipe from The Wise Encyclopedia of Cookery

"PN 456-A Sprocket"—Instructions from The Reader's Digest Fix-It Yourself Manual

All selections from Duck's Breath Mystery Theatre

All selections from The People's Almanac

All selections from The Random House Encyclopedia

"Restaurant Guide"—selection from San Francisco Focus Magazine

All selections from Lane Publishing Co.

John B. Bogart quote

From "Art Ideas":

Dog wagging tail

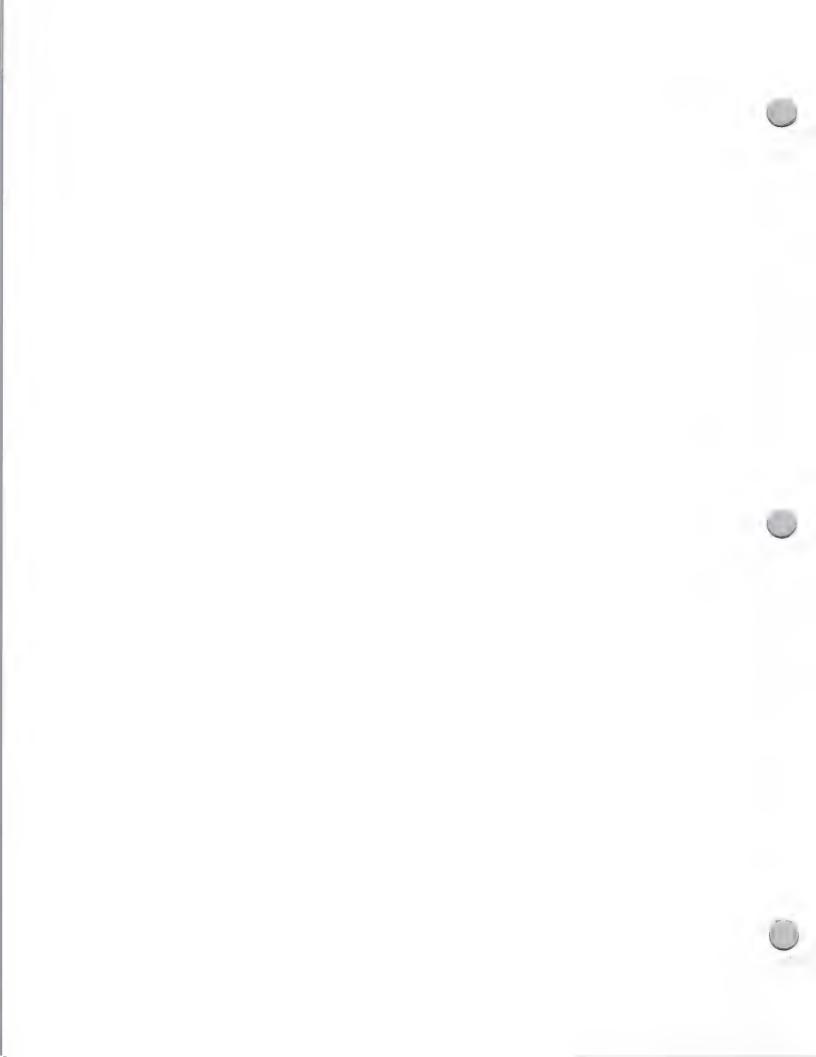
Toaster with pop-up disks

Silhouette of city skyline

Family (man, woman, child) plus dog

Businesswoman/Businessman shaking hands

Apple, the Apple logo, and HyperCard are registered trademarks of Apple Computer, Inc. HyperStacks, HyperTalk, IconMaker, and Stackware are trademarks of Apple Computer, Inc. Macworld is a registered service mark of Apple





Legal Information

Legal Guidelines

October 1, 1988

Apple Trademarks and Service Marks

Apple Computer, Inc. has a growing number of registered and unregistered trademarks and service marks. These marks are listed on the last two pages of this note. Please refer to this list and to the guidelines that follow when preparing your marketing materials, packages, and ads.

The Apple Logo

The Apple logo is the rainbow-striped or solid-color silhouette apple with a bite removed. Only Apple and its authorized dealers, agents, and VARs may use the Apple logo in advertising or sales displays. Apple dealers and VARs may only use the Apple Logo in conjunction with the words "Authorized Apple Dealer" or "Authorized Apple VAR". Third Party developers may *not* use the Apple Logo on products, packaging, manuals, advertisements, or marketing materials.

Variations of the Apple Logo

Some dealers, VARs, and developers believe that it's permissible to use a variation on the Apple logo, a genuine apple or some other fruit design. *This is not true*. Any design of an apple may confuse the customer and lead him or her to believe that the product is from Apple Computer, Inc. Apple prohibits variations of the Apple logo (and other fruit symbols).

The Apple Trademark and Trade Name

The word "Apple" should be used only to denote Apple Computer, Inc. and as a trade mark to designate products manufactured by or under license by Apple. It may not be used in a product, corporate, or store name of another company in the computer-industry category.

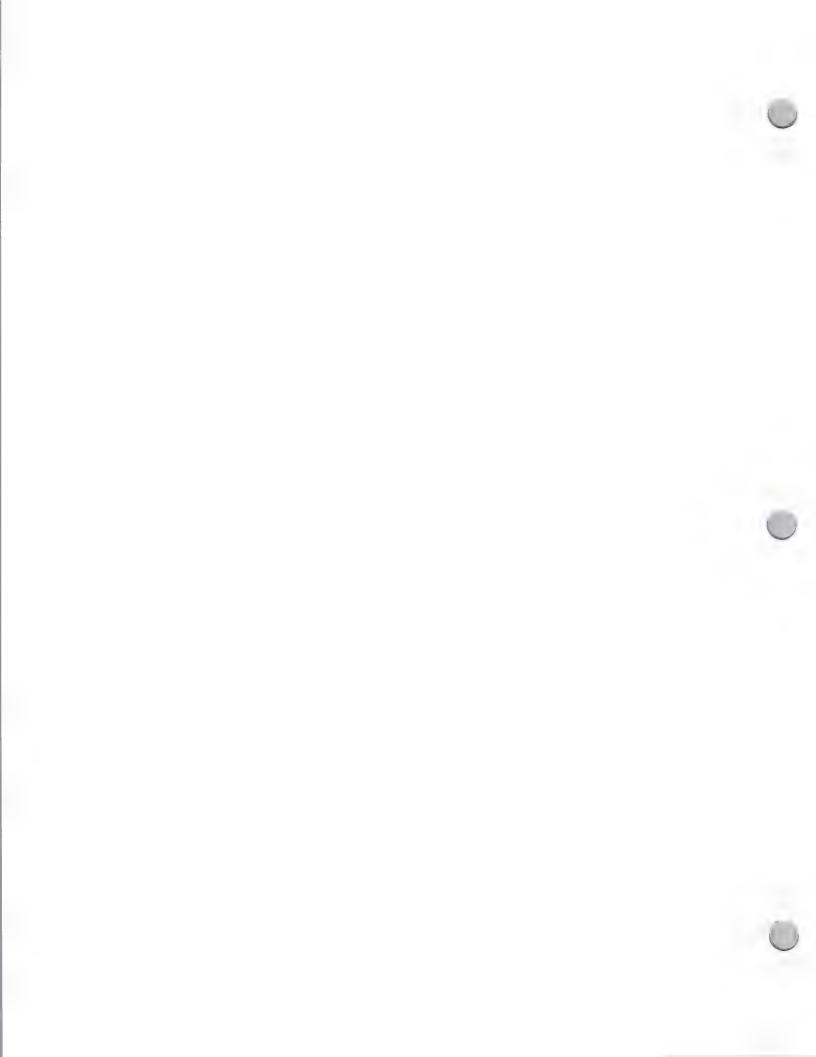
Variations of the Apple Trademark and Trade Name

Dealers, VARs, and software developers may not use any variations or takeoffs on the Apple name in your company or product names. Names such as "Appletree," "Apple Cart," "Dapple," and "A-PEL," may lead customers to believe the company or product is directly related to Apple Computer, Inc.

Rules for Proper Use of Trademarks

A trademark is an adjective used to modify a noun -- that is, the generic name of the product to which the trademark refers. As an adjective, trademarks are never used in the plural or the possessive; only the generic identifier may be pluralized or used in the possessive. For example, you may say. "I bought two Macintosh® computers," but not "I bought two Macintoshes".

The Apple trademarks are only used to identify the products of Apple Computer, Inc. Some of the Apple trademarks have been registered in the U.S.; others are pending registration but are not yet registered. Unregistered trademarks use the "®" notice symbol. Notice symbols are used at the right shoulder of the trademark (except the Apple





Legal Guidelines

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Logo, which uses it at the right foot). Refer to the attached trademark list to determine which products should receive the "®" symbol and which should receive the "TM". The notation symbol does not apply to "Apple" used as the trade name of the company.

When an Apple trademark first appears in text or copy, it should be followed by the appropriate trademark symbol and by the generic product name. After this initial notation, the trademark notice symbol does not have to be used again, while the generic name should be used as frequently as possible. Trademark notation need not appear in headline text — only in body copy. However, when Apple trademarks are used on packaging, they should always be accompanied by the appropriate trademark symbol.

Showing Third Party Product Compatibility

Third-party developers may denote compatibility of their products with Apple computers in the following way:

BLOTTO for your Apple IIGS® personal computer

MacStar for the Macintosh® SE computer

The Apple or Macintosh names must appear in smaller print after or underneath the product trademark, as shown in the preceding examples. This rule applies also to the use of Apple trademarks in subtitles for books and manuals.

You may also use words such as "runs on," "for use with," or "compatible with" to show compatibility. Compatible products should *not* be referred to as "Apple software" or in any way that implies that the product is produced, endorsed, or supported by Apple.

Credit Lines

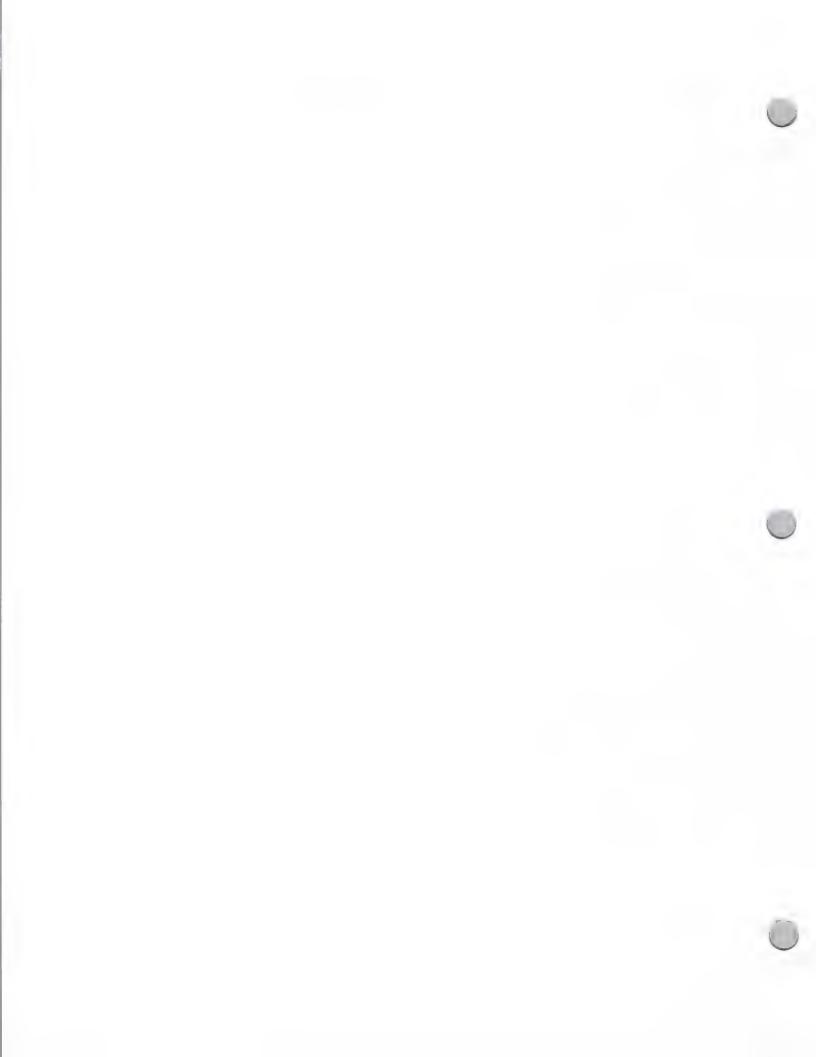
Your fine-print credits should state that Apple, Macintosh, Apple IIGs, or any other Apple trademarks you have used belong to Apple Computer, Inc. For example, "Apple and the Apple logo are registered trademarks of Apple Computer, Inc.," or "AppleLine is a trademark of Apple Computer, Inc." Refer to the attached list to determine whether a trademark is registered or unregistered. Credits should be placed on the copyright page of a manual or at the bottom of an ad.

Product Depiction

Depiction of Apple products must be a fair representation of them as manufactured and sold by Apple. They should be shown only in the best light and not in a manner or context that would reflect unfavorably upon them or the company.

Use of the "Mac" Trademark

"Mac" is a trademark of Apple Computer, Inc. and refers to the Macintosh computer only. Many third-party developers have incorporated "Mac" into their product names, such as MacVegas, MacCharlie, and so forth. In the past, Apple has allowed software developers to do this as long as





Legal Guidelines

October 1, 1988

"Mac" and "Mac-prefix" marks may not be used as a corporate, trade, or business name, for hardware products, periodicals, or any other computer related goods or services.

Package Design

Some dealers, VARs, and developers try to emulate Apple's package designs. Features such as the black "pull-down" box, the "Geisha girl," and the overall box layout are part of our trade dress. Apple discourages imitations.

Misuse of Apple Trademarks

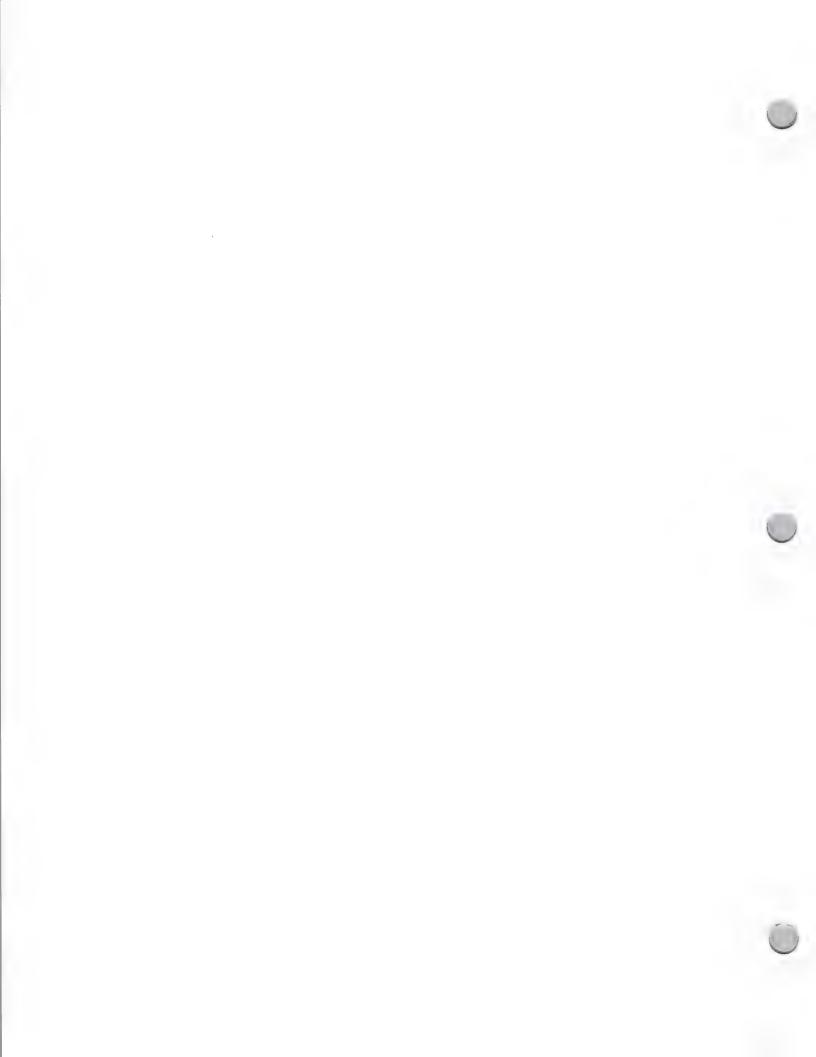
The Apple trademarks, trade name, and trade dress are valuable property rights of Apple Computer, Inc. Please treat them properly, in accordance with the foregoing guidelines. If you have any questions, please talk to your Apple representative, or send an AppleLink to APPLETM to reach Apple's corporate Trademark department. Remember, misuse of the Apple Logo (or any other Apple trademark) may result in a breach of your dealer, VAR, or developer agreement, or may subject you to trademark infringement or passing off claims.

The Acid Test

If you're unsure about your product name, packaging, or advertising, ask yourself the following questions:

- 1. Could the name lead the customer to believe the product is from Apple?
- 2. Does the material use Apple trademarks in any way other than to show that the product is compatible with an Apple system or to discuss features of the Apple product?
- 3. Is there an apple or fruit symbol in the artwork?
- 4. Does the artwork contain any other Apple Computer logos (or variations of them), such as the Macintosh "Picasso" logo, the Bicycle logo, and so on?
- 5. Does the package design bear enough resemblance to Apple's to confuse a customer at first glance?

If you can answer "yes" to any of the above questions, we suggest that you change your trademark, name, ad, or design so that it avoids confusion with with Apple's trade name, trademarks, and trade dress.





Legal Guidelines

October 1, 1988

Apple Computer, Inc. Trademark List-October 1988

Apple's Registered Trademarks (Use ®)

A-NET®

Apple® (when referring to Apple products, not the company

Apple[®] (striped or solid logo)

AppleLink® AppleShare®

Apple Software Bank ®

Apple IIGS®

AppleTalk[®] A/UX®

AppleWorks®

DeskTopics[®] (for computer programs and periodicals)

Disk II ® (and design)

Diskware[®]

DuoDisk[®]

DuoFile[®]

FileWare[®]

HyperCard ®

ImageWriter[®]

The Keyboard Company®

LaserWriter[®]

Lisa®

Mac[®]

MacApp[®]

Macintosh[®]

Macintosh Today®

Macintosh Week®

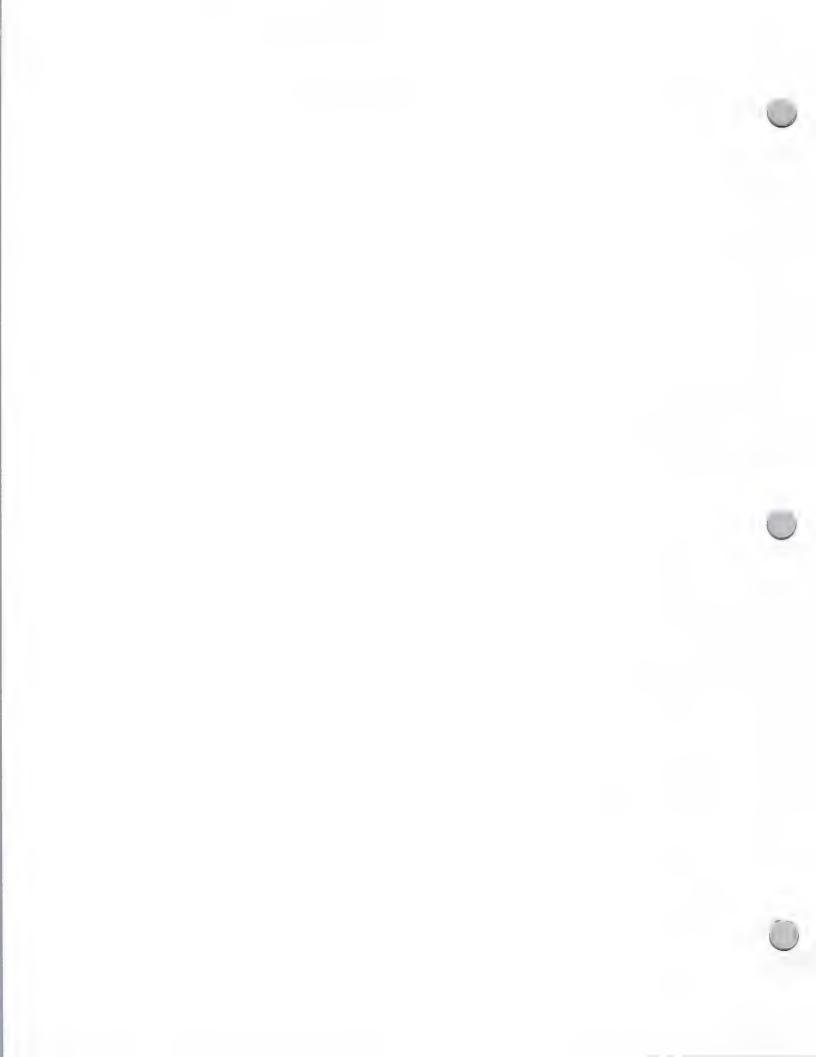
MacTerminal®

MacWorks®

MacLetter[®]

MacUpdate[®]

Macworld®





Legal Guidelines

October 1, 1988

MacWorks[®]
Professional Solutions[®]
QuickFile[®]
SANE[®]
SchoolBus[®]
Silentype[®]
Special Delivery[®]
Special Delivery Software[®]
HGS[®]
Wheels for the Mind[®]

Apple's Registered Service Marks (Use ®)

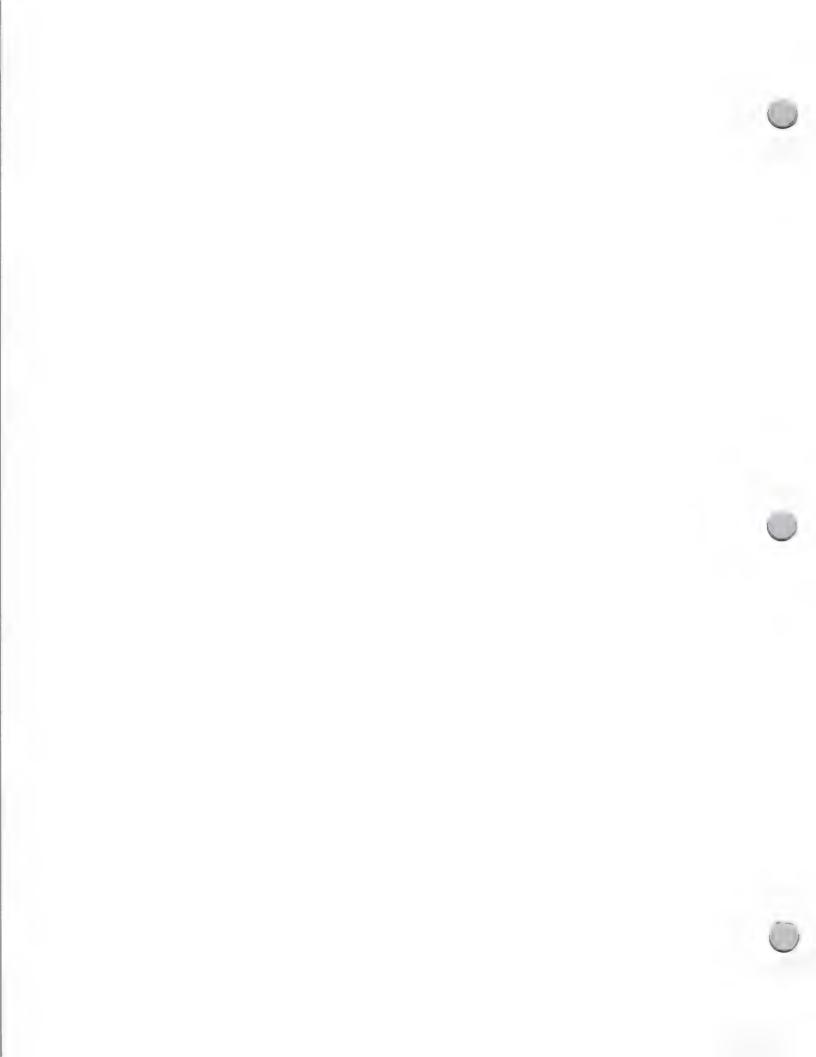
Apple[®] (for retail credit)
Apple[®] (and design, for leasing)
AppleCare[®] (for service)
AppleFest[®] (for conducting expositions)
Computer Apples[®] (for programming services)
MacFest[®]

Apple's Trademarks Pending Registration (Use TM)

Colors (bands of green, yellow, coral, red, violet, and blue) AppleNetTM
DeskTopicsTM (for publications)
There's No Telling How Far It Can Take You...TM
UniDiskTM
UniFileTM

Apple Servicemarks Pending Registration (Use sm)

Apple Answerssm
Apple Open House_{sm}
ACOTsm (Apple Classroom of Tomorrow)
Apple Developer Services (design)
Apple Open Housesm
Apple Puts it All Together_{sm}





Legal Guidelines

October 1, 1988

ARC sm (Apple Repair Coupon)

Apple Training Alliancesm

AppleWorldsm

Education Linksm

MacAdemiasm

Solution Expresssm

The Information Exchangesm

Other Apple Trademarks

AppleCD SC™

APDATM

Apple DeskTop Bus™

AppleFax™ Modem

AppleFundTM

AppleLineTM

AppleMouse™

Apple PiTM

AppleStacksTM

Apple WriterTM

EtherTalkTM

Finder TM

GS/OSTM

HyperStacks™

HyperTalkTM

IconMaker™

Knowledge NavigatorTM

LaserShareTM

LocalTalkTM

MacinTalk TM

Macintosh Today™

MacStacksTM

MacWorkStation™

MPW TM

MultiFinder

ProFile™

QuickStartTM

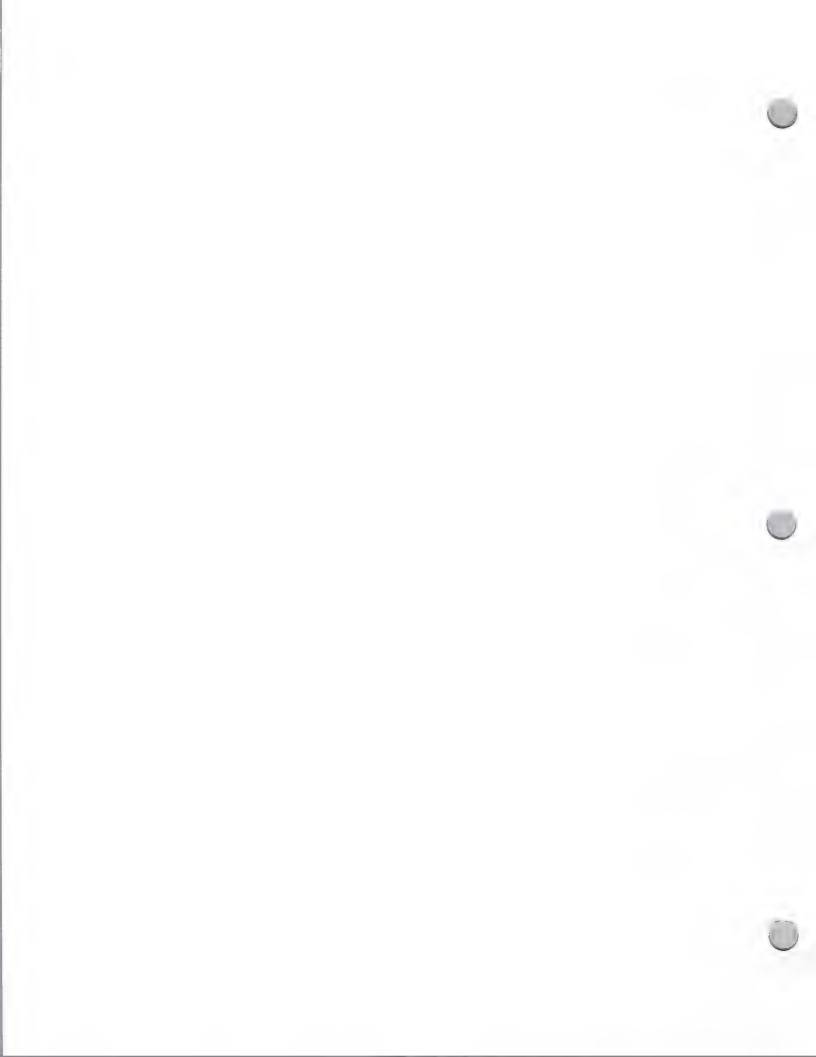
ResEdit TM

Setting the Pace™ (logo for Apple Education)

StackwareTM

The Education DealerTM (logo)

Apple Common Law Trademarks (Use TM)





Legal Guidelines

October 1, 1988

Apple 11 ForeverTM
Apple 32 SupermicroTM
E-BoxTM
MousePaintTM
QuickDrawTM
SwitcherTM

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Helvetica[®]

Times[®]

Palatino[®]

ITC Avant Garde Gothic®

ITC Bookman®

ITC Zapf Chancery®

ITC Zapf Dingbats®

Credit Lines for Licensed Trademarks

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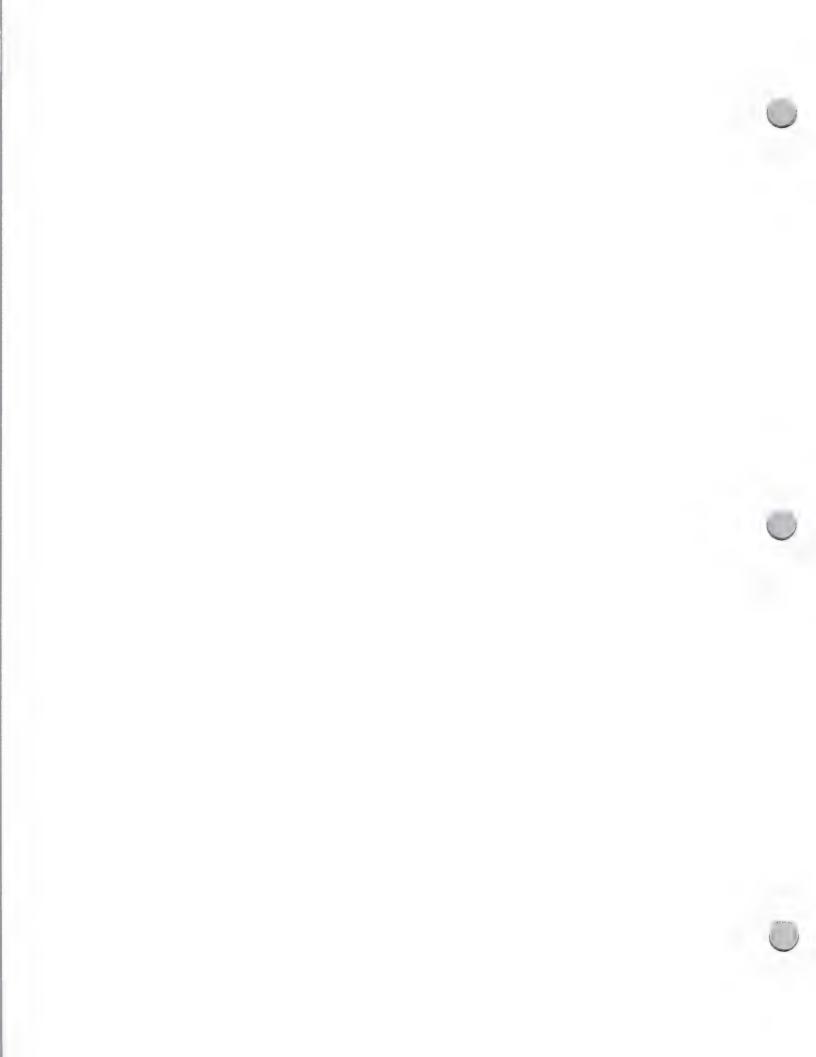
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CLARISTM
HyperDemoTM
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MacPaint®
MacProject®
MacWrite®
SmartformTM
Smartform DesignerTM





HyperCard Trademarks

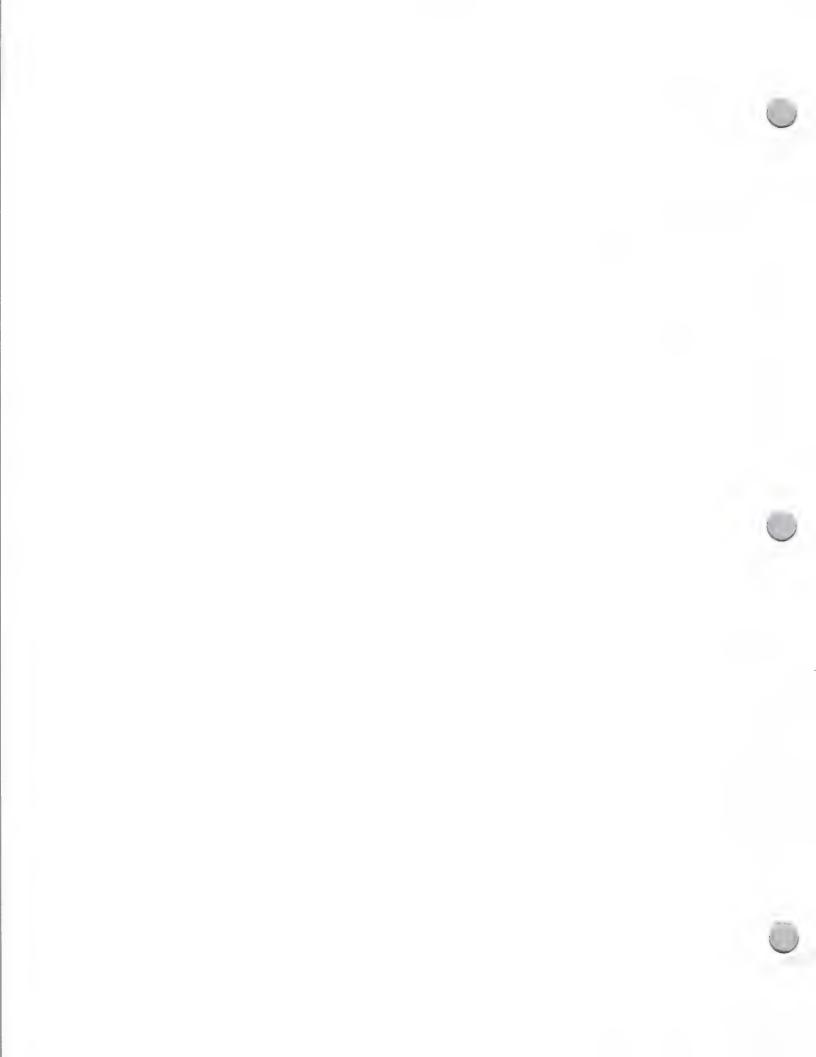
Legal Guidelines

October 1, 1988

Apple has established trademark rights to the following names relating to HyperCard. These trademarks may not be used on third party products. When referring to one of these marks, apply the "TM" notation and state in the credits that the trademark belongs to Apple Computer, Inc. Please note that as of February 1988, HyperCard® is a registered trademark of Apple Computer, Inc.

- HyperTalkTM
- Stackware[™]
- MacStacksTM
- AppleStacksTM
- HyperStacksTM

"Stackware" is NOT a generic term and is not in the public domain. "Stackware" is the trademark for HyperCard stacks produced by Apple Computer. The word "stacks" is generic and is available to third party developers.



Legal Guidelines

October 1, 1988

Apple Software Licensing Program

If your software or hardware product uses all or part of some Apple® software (for example, an operating system, U.S. or International version), you will need to license the use of that software from Apple Computer. This applies to any Apple-compatible products that will be sold, used internally, or given away.

To obtain a Software License Agreement Packet, contact Apple's Software Licensing Department. Please note that it is critical that you contact this group prior to producing written materials associated with your product (such as manuals and disk labels), because there are several legal requirements that you need to be aware of. For example, Apple requires you to include a warranty disclaimer and other legal information in your manual. In addition, you are required to place Apple's copyright notice on your disk label. If your product will ship overseas, the warranty period and legal requirements will differ depending on the individual country. For more information, you should speak directly with the 3rd Party Manager in each Apple subsidiary. See the International Contact List under "Apple Contacts" for specific information.

The Software License Agreement Packet contains the following:

- Two copies of the Software License Agreement, which describes your legal rights and limitations when distributing Apple-copyrighted software
- Two copies of the HyperCard License Agreement and HyperCard Technical Guidelines
- · A list of Apple software available for licensing for both U.S. and International products
- Third Party Trademark Guidelines for the United States

A modest, once-a-year fee, which covers only Apple's administrative costs, authorizes you to use the Apple software in your program. There are no royalties.

Your Benefits as a Licensed Apple Developer

As a properly licensed developer, you will have the right to use Apple-produced software, which would be costly and time-consuming to develop yourself. In addition, you will receive free updates to the software you are using in your program, so you can always keep your product up-to-date.

How to Contact Software Licensing

Please contact our Software Licensing Department to obtain the Software Licensing Agreement Packet.

Apple Computer, Inc. 20525 Mariani Avenue, M/S 28B Cupertino, CA 95014 Attn: Software Licensing Program (408) 973-4667

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General Information

October 1, 1988

One of the benefits of being an Apple Certified Developer is that you are allowed to purchase your development equipment directly from Apple at a substantial discount.

This will review the objectives of the Developer Purchase Program and familiarize you with the way the program works. When the guidleines below are followed, your equipment orders will be processed without interruption and we can provide you with the development equipment necessary to help bring your company's product(s) to market.

Program Objective:

Our objective is to give Apple's Certified Developers the opportunity to purchase a limited amount of equipment for development directly from Apple at a significant discount. Certified Developers are allowed to purchase a maximum of 20 systems per product family per calendar year. These systems are to be used for development purposes only. The equipment available through the Developer Purchase Program is published on a price list that is sent out on a quarterly basis; addendums to the price list are sent out monthly.

Program Operations:

The Developer Hardware Purchase Program functions out of two Apple support centers: One located in Sunnyvale, California and one located in Charlotte, North Carolina. The support centers process and administer all developer equipment orders. There is a person at each support center designated to handle developer orders and to assist you once your order has been placed.

Ordering Guidelines:

To ensure that your order is processed efficiently, please follow these guidelines:

• Send your order to the proper location. All orders should be sent directly to the Apple support center that handles your account. The support center that you should use is determined by the location of your company.

West of the Mississippi:

AK, AZ, AR, CA, CO, HI, ID, IA, KS, LA, MN, MO MT, NE, NV, NM, ND, OK, OR, SD, TX, UT, WA, WY

Apple Computer, Inc. 904 Caribbean Drive Sunnyvale, CA 94089 ATTN: Developer Orders

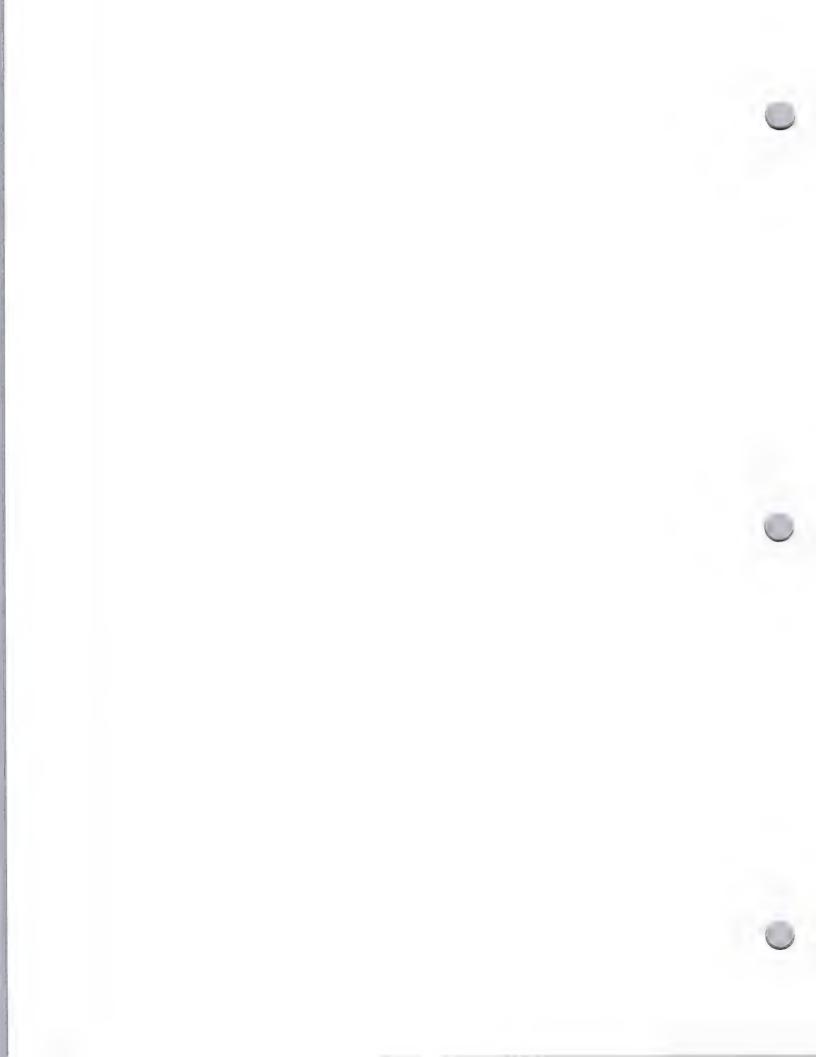
East of the Mississippi:

AL, CT, DE, DC, FL, GA, IL, IN, KY, ME, MD, MA, MI, MS, NH, NJ, NY, NC, OH, PA, RI, SC, TN, VT, VA, WV, WI

Apple Computer, Inc.
ATTN: Developer Orders
5130 Parky and Plant

5130 Parkway Plaza Blvd./PO Box 241028

Charlotte, NC 28210





General Information

October 1, 1988

- Do not send orders to Developer Programs in Cupertino, California. Sending your order to Developer Programs could add two weeks to the turnaround time involved in processing your order. (It can take that much time to have your order redirected and received by the appropriate support center.)
- Direct your ordering questions to the appropriate support center contact.

 Once your order has been placed and you have questions on the status of your order, billing questions, product availibility, please contact the person listed below. For general information on ordering equipment you can call the Developer Hotline at (408) 973-4897.

Charlotte Support Center

Scott Killian at (704) 525-8120

Sunnyvale Support Center

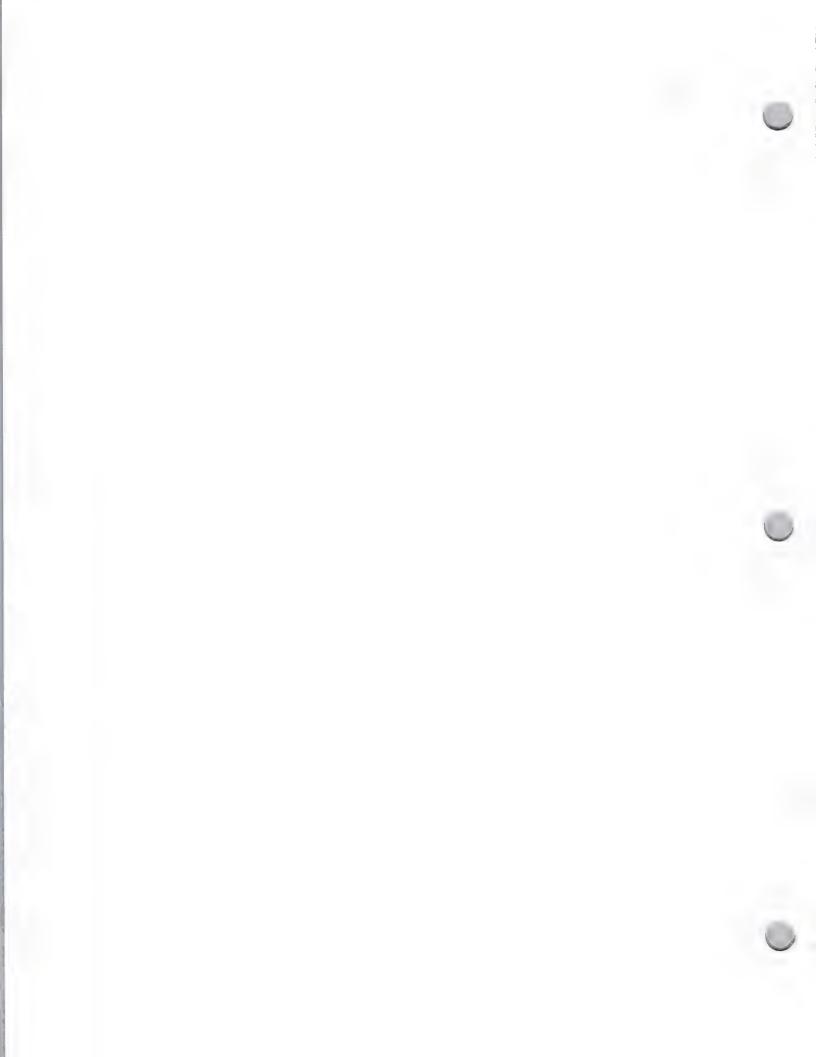
Janet O'Connor at (408) 744-6349 or Janice Bronte at (408) 744-6265

General Information:

- <u>Delivery/Turnaround time</u>. The support centers try to deliver all equipment within four to six weeks after receipt of your order. Although Apple cannot guarantee shipment within this time period, we ask that you wait at least 4-6 weeks before calling to check the status of an order.
- Confirmation of an order. Apple does not send out a confirmation notice for developer orders. We encourage you to send your order certified mail to ensure receipt.
- <u>Problem with billing/invoice</u>. The support centers will send you a bill/invoice with all equipment orders. Please be aware that if you prepay an order, you will still receive a bill/invoice. Disregard the amount due if your order was prepaid. If you didn't receive all of the equipment that was ordered, and it doesn't appear on your invoice, it is likely that it's on back order and will ship when it becomes available.
- Obtain equipment service from your local dealer. If you have problems with any equipment purchased through the Developer Purchase Program, you should take it to the nearest authorized Apple dealer for repair. Equipment is covered under warranty if brought in for repair within 90 days of the shipping date. You will need to bring a copy of your packing slip/invoice for proof of purchase.

Direct general questions to Developer Programs - If you have questions regarding pricing, need additional order forms, or are simply in need of some general information on the Developer Purchase Program, please call the Developer Programs Hot-Line at (408) 973-4897.

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DeveloperEd Training

General Information

October 1, 1988

What is DeveloperEd Training?

DeveloperEd Training is intended for the serious, experienced developer who plans to develop Macintosh applications. The seminars are presented in several Apple sales offices throughout the country.

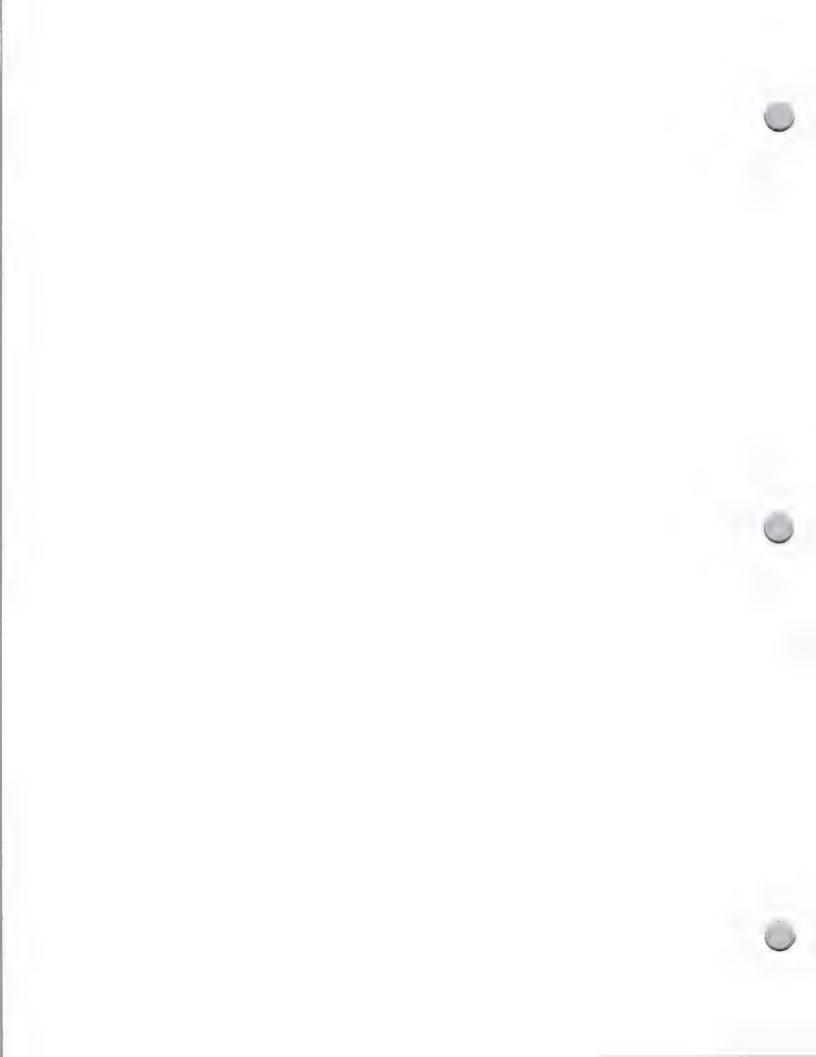
How to Register

Contact the Registrar at this address:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51-T Cupertino, CA 95014 Attn.: Marian Djurovich Macintosh Programming Seminars Registrar (408) 973-6215

Look for a complete list of these and other classes in the new *Product Information Service*, which will be available from Developer Programs — and shipped to you — in the fall of 1988.

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ACOT

General Information

February 1, 1988

What Is ACOT?

Apple Classroom of Tomorrow™ (ACOT) is a long term, school-based action research and applied development project intended to simulate a future educational situation in which every student and teacher has constant access to computers.

In FY '86, ACOT equipped seven classrooms across the U.S. with not only a computer on each student's desk, but also one at each student's home. The levels span the second through tenth grades. Each class has at least one Macintosh™ and an average of 40 Apple® IIe and IIc personal computers. The ninth and tenth grade classes have 70 networked Macintosh systems to complement the Macintosh each student has at home.

The point of having computers at school and at home is to make learning through computers as ordinary as using a pencil. ACOT's purpose is to investigate the effect of computers on education and administration. With its 2-to-1 computer-to-student ratio, ACOT demonstrates the advantages of round-the-clock computer access. By providing good software, good management programs, and an integrated curriculum, ACOT seeks to demonstrate how centrally important teaching and learning on computers can be to the educational process.

During FY '88, ACOT will address the following:

· Teacher training and support to achieve greater individualization of instruction

• Strategies to facilitate the transition from lecture-and-recitation instruction to computer-based instruction

• Use of LAN software for more efficient management of instruction

Classroom designs that promote student collaboration in learning activities

• The impact of word processing on the quality and quantity of student writing

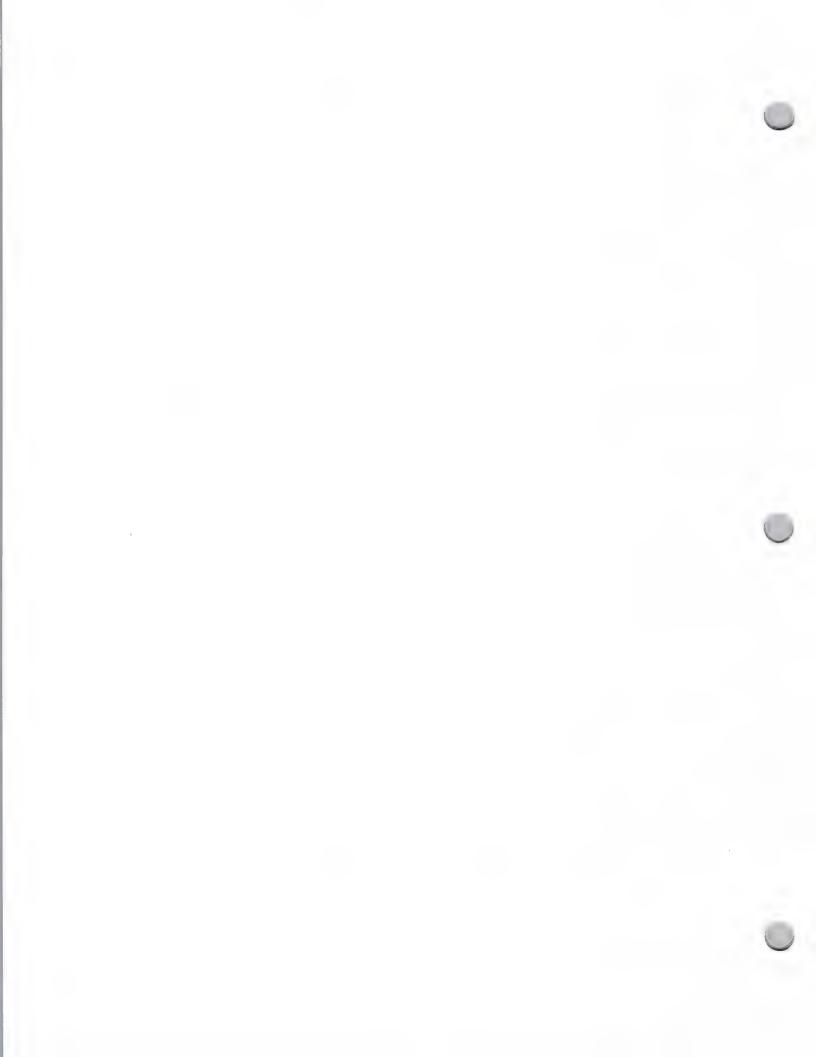
And the effects of computer use on student motivation

What ACOT Is Looking For

ACOT is continually looking for innovative educational software packages for integration into their curriculum. The people involved are specifically looking for packages that support individual homework applications or that include a homework component with a student management system so that teachers can see the results of overnight study.

How Developers Can Get Involved

Developers are encouraged to donate packages and lend support to the project schools. Becoming involved with the ACOT project allows the developers to see firsthand how students and teachers utilize and respond to their products. Apple promotes ongoing dialogs between developers and site participants. This offers the developers timely and constructive feedback about their products.





ACOT

General Information

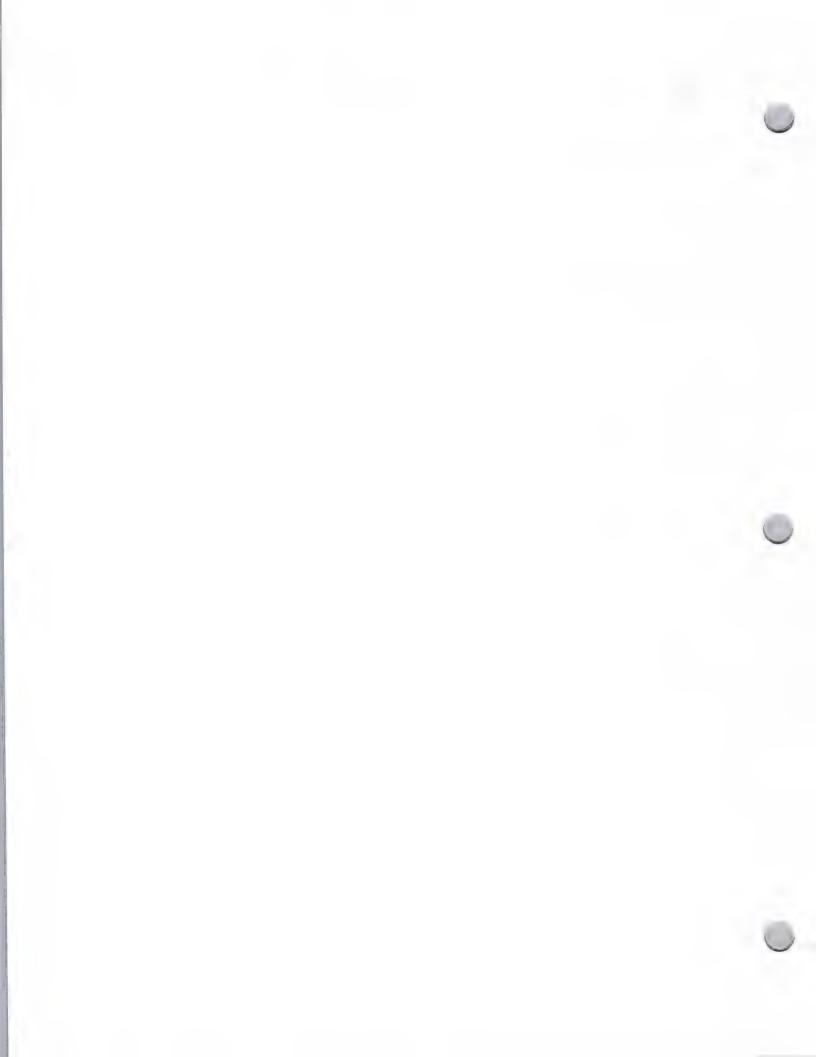
February 1, 1988

If you wish to be considered for involvement in this program, please contact:

Apple Computer, Inc. 20525 Mariani Ave., M/S 22J Cupertino, CA 95014 Loree Taylor ACOT Project Coordinator

(408) 973-6095 AppleLink®: ACOT

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AppleLink Program

General Information

October 1, 1988

What Is It?

AppleLink® is Apple's worldwide information and communications network. It is a fast, interactive system that runs on the Macintosh® and Apple® II (available early winter). Apple employees use it as their primary vehicle for communication with key customers and business partners, including Certified Developers, authorized Apple dealers, user groups, and university, K–12, special education, VAR, National Account customers, and Apple's international subsidiaries.

We would like to extend an offer to you to become a part of the AppleLink community, so that you, too, can use AppleLink to communicate directly with Apple, your customers, business partners and with Apple's offices all over the world. Once you're on AppleLink, you'll be able to do the following:

- Post promotional offers to Apple dealers, direct customers, and user groups on the Third-Party Programs bulletin board
- Post software demos that dealers can download
- Update your customers with small software patches
- Exchange information with Apple User Groups and VARs regarding your products and your needs
- Provide customer technical support to Apple dealers and direct customers
- Provide technical support articles to the Technical Information Library
- Access current information about Apple and third-party products and programs
- Obtain technical information from Apple's Developer Technical Support group
- Obtain the most current developer price list
- Obtain specific information from the 3rd Party Manager in each country

AppleLink Bulletin Boards and Libraries

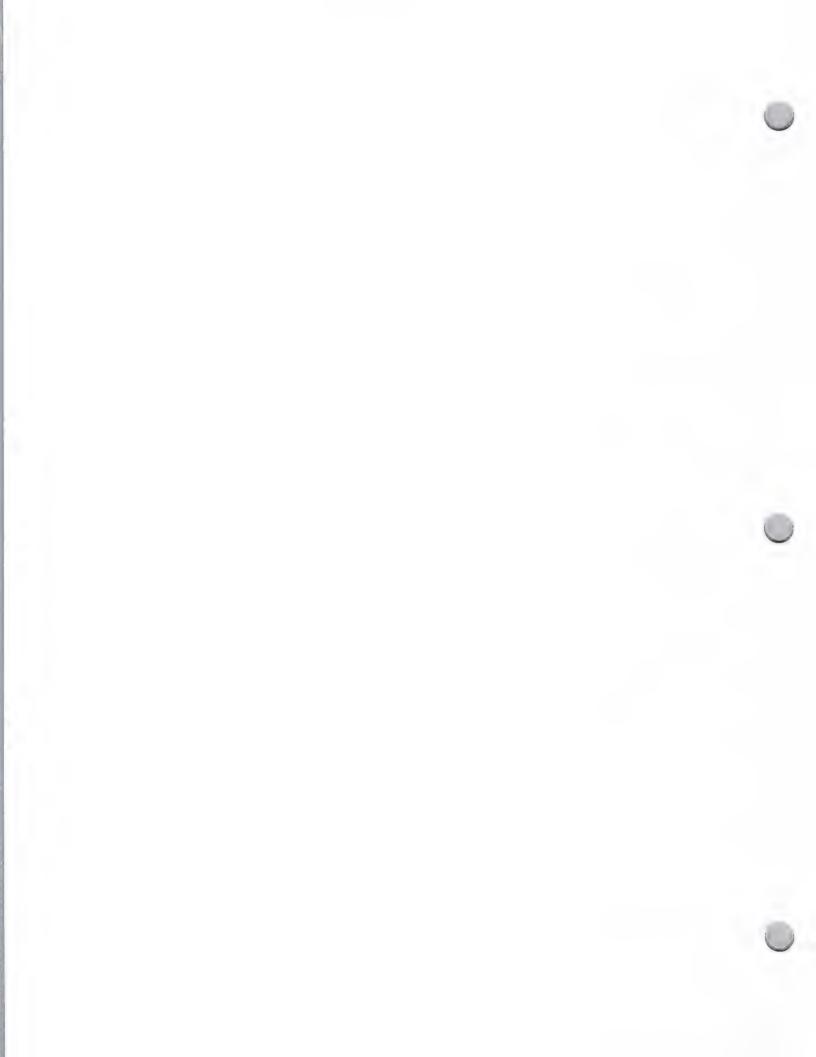
As an AppleLink participant, you will have access to the information contained in these bulletin boards and libraries:

Headlines & Guide—Contains highlights of new information on AppleLink, as well as Apple press releases, and guide and help files for AppleLink.

Apple and Third-Party Products—Offers descriptions of more than 15,000 Apple and third-party products from the MENU database.

Apple Programs—Contains information about Apple promotions and programs, covering areas such as desktop communications, financial programs, training support, corporate grants, the Apple Training AllianceSM, and special education.

3rd Party Programs—Provides third-party developer support information from the Developer Programs group. In addition, developers can post promotional offers, software demos, and small software patches for dealers to download for your customers. It also contains compatibility listings





AppleLink Program

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of third party products, listings of third party products that take advantage of the features of our computers, the MENU third party product library, the Special Education (SPED) library folder, and APDA and Addison-Wesley updates.

Technical Information Library—Contains technical information on Apple and third party products, including product specifications, errata sheets for manuals, and interfacing information.

Product Prices—Contains a current Developer Programs Confidential Price List.

Reference Library—Allows you to access information such as Apple product packing lists, descriptions of Apple manuals, compatibility guides and the current version numbers of Apple software.

User Groups—This is a two-way, interactive bulletin board; you can read messages and also post them. Sections on this board include Apple Product Information Exchange, Meeting Support, User Group-to-User Group News, General News, and Developer Exchange.

Developer Services—This is a two-way bulletin board. Its purpose is to provide a one-stop area where developers can be kept up-to-date on all the groups that they work with on a continual basis: Developer Programs, Evangelism, Developer Technical Support, Developer Tools, and Third Party Marketing. It will also include a section called VAR/Developer Exchange. This is an area where developers and VARs can communicate; for example, developers can offer product information, or VARs can seek a particular third-party product or provide program information. Macintosh and Apple II technical notes and *The Information Exchange* are also located in this board.

DTC—The Desktop Communications bulletin board is a two-way bulletin board. Its purpose is to increase sales of communications software and hardware by getting marketing and technical information to the people who need it. It contains information on Apple and third party DTC products, technical information, success stories, bulletins, and a conferencing area where subjects like Macintosh workgroups, MS-DOS connectivity, and IBM host environments can be discussed.

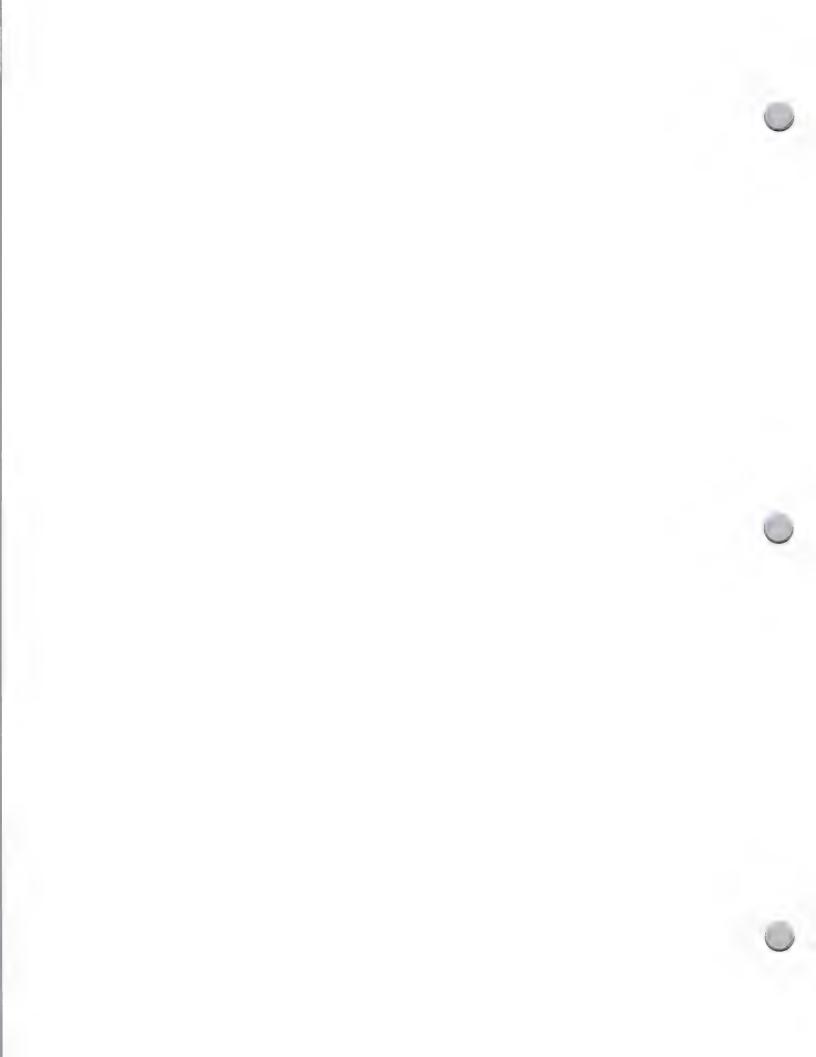
How to Obtain an AppleLink Address

If you are interested in participating in the AppleLink program and are a Certified Developer, please contact Developer Programs and request an AppleLink Application packet. This packet will contain all of the information that you need to sign up for an AppleLink address.

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51W Cupertino, CA 95014 Attn: AppleLink Developer Support Program (408) 973-4897

Pricing Information

An annual fee of \$45 is charged for each AppleLink address. You will be billed each month for your





AppleLink Program

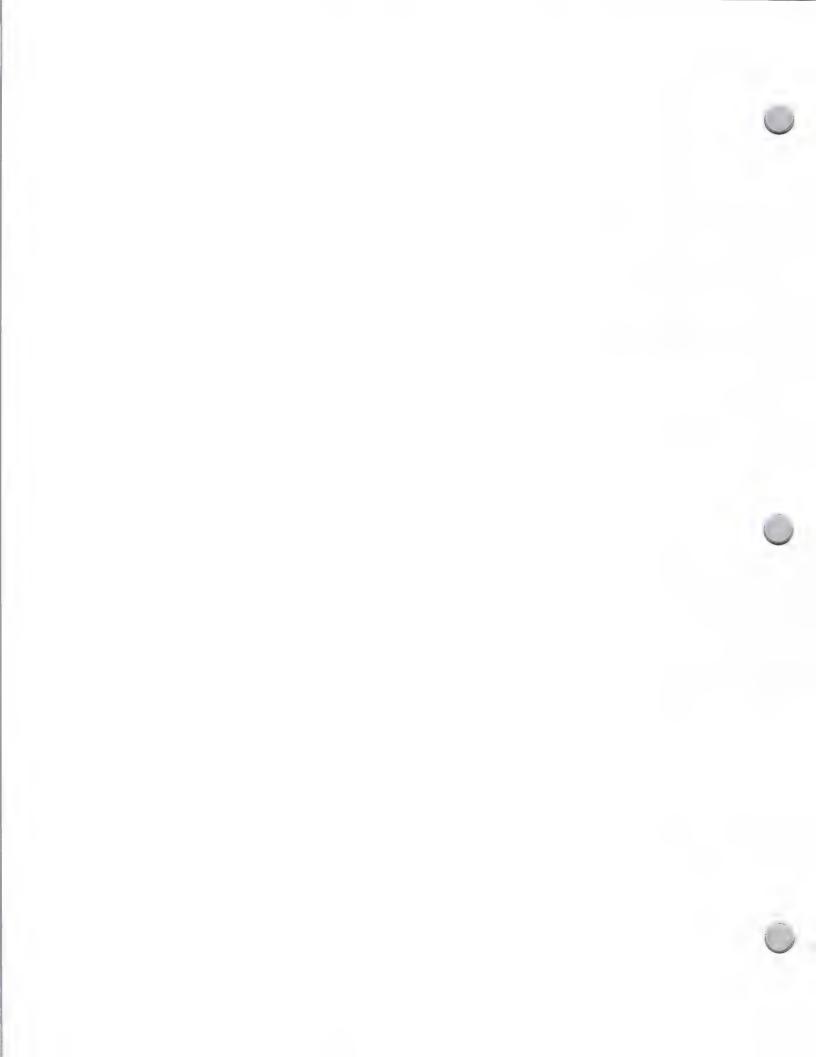
General Information October 1, 1988

connect time on the AppleLink network. The charges are \$25 an hour for prime time (6 A.M. to 4 P.M., Pacific Standard Time) and \$12.50 an hour for other hours. Each AppleLink address will be billed at a minimum of \$12.50 per month.

AppleLink Feedback

In order for us to make the AppleLink program a worthwhile one for you, we need your feedback. Please send any comments, criticisms, or suggestions regarding AppleLink—any problems you have had with it, what information you'd like to see that's not currently available, and/or what you don't find useful—to the Developer Programs AppleLink address, DEVSERVICES.

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Apple Community Affairs

General Information October 1, 1988

Apple in the Community

Through its Community Affairs department, Apple Computer donates computer systems to nonprofit social service and arts groups and K-12 schools. The goal is to share Apple's technology with deserving groups and individuals so that they can benefit from the tools of high technology. Almost 2,000 nonprofit organizations and schools have received equipment from Apple under the company's various philanthropic programs.

Apple would like to give you the opportunity to become involved in the Community Affairs program. The following is an overview of the program and ways that you may be able to participate.

Who Receives Equipment from Apple?

Nonprofit Groups: The nonprofit recipients are quite varied, but they may exhibit the following characteristics:

• Small to medium-sized social service agencies, with annual budgets of less than \$1 million

· Located throughout the United States, in both rural and urban areas

• Work in virtually every area of human services, including substance abuse, housing, domestic violence, the environment, and the arts

Provide direct services to clients, undertake research projects

- Act as advocates for disenfranchised groups, and promote community awareness of many social issues
- Include people with a full range of familiarity with the technology, from computer novices to skillful and experienced users, who develop templates for customized spreadsheets, handle sophisticated desktop publishing, or make extensive use of telecommunications

K-12 Schools: The K-12 school recipients share the following characteristics:

 Support projects that target the economically disadvantaged, ethnic and linguistic minorities, the disabled, girls studying math and science

Focus on integrating computers into daily classroom subjects, as opposed to drill-and-practice and computer literacy

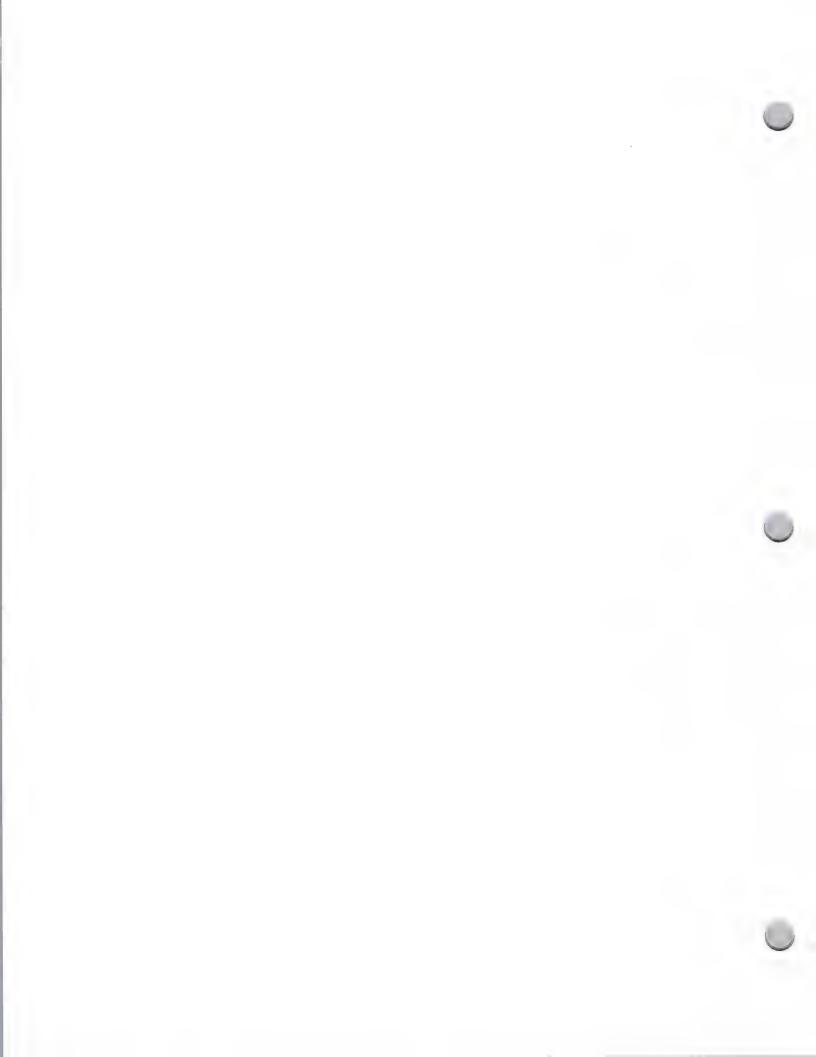
Located throughout the country, in both rural and urban areas

• Undertake projects jointly with a university or college, which includes teacher training as a component of the project

What Do Grantees Do with Their Equipment?

Besides streamlining business and administrative tasks, Apple grantees are utilizing the computers in a number of interesting and innovative ways.

The nonprofit groups are undertaking projects built around the use of computer technology. These include massive database projects, sharing information among geographically isolated groups, and operating local electronic bulletin boards that can be accessed via personal computer. Educational projects are incorporating computers into innovative classroom applications, such as maintaining an ecological database (with information collected by students themselves), using





Apple Community Affairs

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adaptive devices for disabled students to increase their opportunities to succeed in the classroom, and developing teaching materials relevant to Native American children.

In addition to the equipment, Community Affairs provides continuing training and support through workshops, department publications, phone contact, and AppleOink, with a special electronic bulletin board called *GrantLink*.

What Equipment Do Apple Grantees Receive?

Currently, 90 percent of nonprofit groups have been granted a Macintosh® SE personal computer with an internal 20-megabyte hard disk, an ImageWriter® II printer, Apple® modem, and software. In addition to MacPaint®, MacWrite®, MacTerminal®, and MacDraw®, each grantee receives a copy of Microsoft Works, a contribution from Microsoft Corporation. Other grantees have received Apple IIe systems. Because of the tremendous potential of telecommunications, grantees also receive an account on the AppleLink® information and communications network, so that they can easily share information and resources on line.

Most K-12 schools receive Apple IIe equipment, and others are being supported with Macintosh equipment.

What Are the Special Needs of Apple's Grantees?

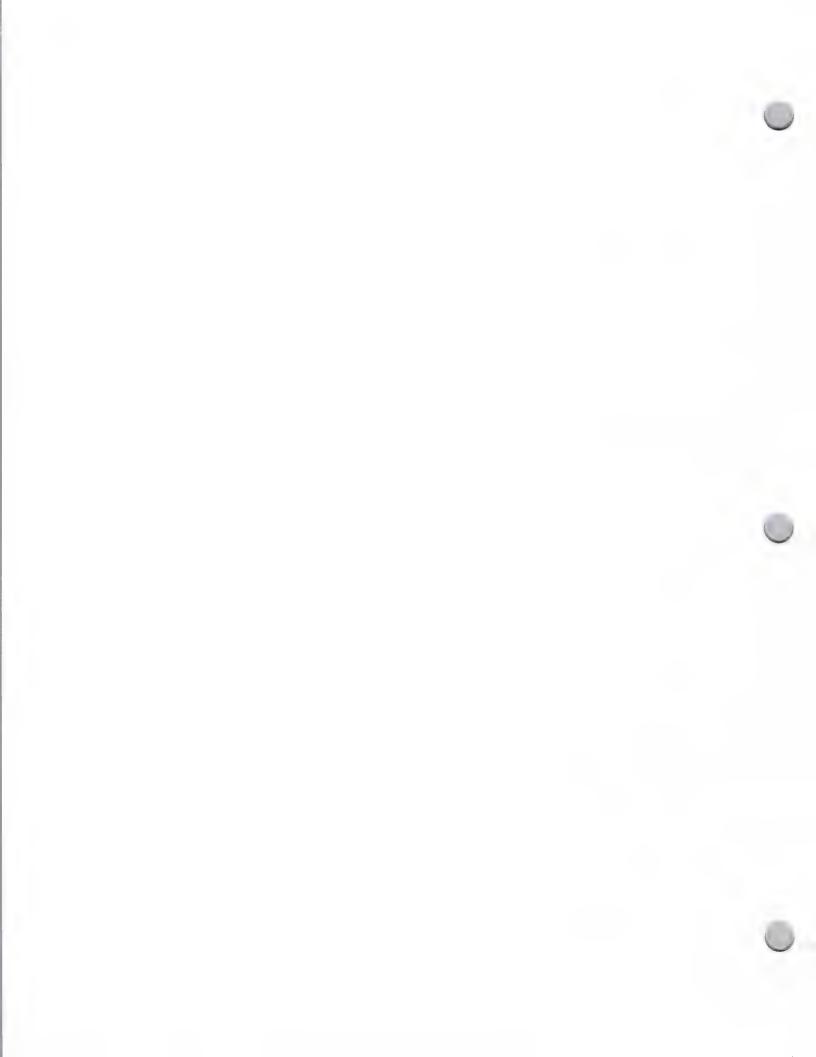
Since nonprofit groups supported by Apple are essentially small businesses, their computer-related needs typically parallel those of the business environment. Typical applications include word processing, spreadsheets, databases (very heavy use), and telecommunications.

There are, however, some special needs of nonprofits that have not been addressed very rigorously by software developers. As a result, vertical market software is needed to meet these needs. These include donor management (to keep track of donations by individuals, corporations, and other funders) and fund accounting (to keep track of how funds are used in order to produce reports required by funders).

Many of the education grantees are using off-the-shelf software in their projects—both educational and generic packages. Educational products include those addressing reading, writing, English, math, science, arts, and interdisciplinary studies. Several grantees are also using more specialized software; for example, to perform science experiments using the computer with interface devices or to compose music. Schools also use generic products such as graphics and database programs for office and classroom administrative applications.

How Can Developers Get Involved?

• Donate Software—Apple grantees are extremely visible in their communities, and many have received a great deal of publicity about their work. A software donation gives you the opportunity to provide a public service while getting exposure for your





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product—and feedback about its utility. We ask that you get in touch with Apple Community Affairs to talk about the kinds of software you would be willing to share.

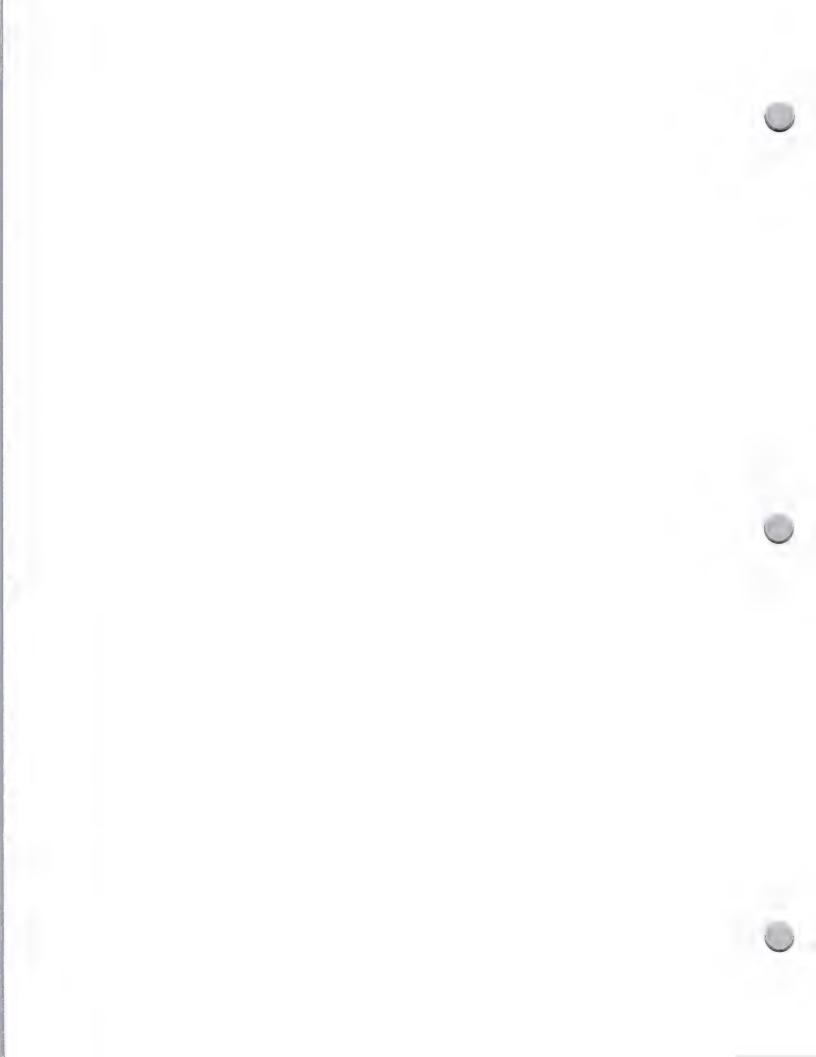
- Apple Community Affairs Newsletter—If you send Apple Community Affairs a sample copy of new programs with explanatory materials, the group may include information about your products in its newsletter or on the *GrantLink* electronic bulletin board.
- GrantLink An AppleLink bulletin board has been developed just for grantees.
 You can contribute demos of new third-party software that can be downloaded from the bulletin board.
- Beta Testing—Apple grantees make ideal testers of new products in your beta or introductory stages. Financial packages (including fund accounting and donor management) and desktop publishing are of particular interest to Apple's grantees.

If you are interested in discussing these opportunities—or in finding out about Apple's grantees in your area—you can get in touch with this group by contacting Community Affairs:

Apple Community Affairs Apple Computer, Inc. 20525 Mariani Avenue, M/S 38-J Cupertino, CA 95014

(408) 973-2974 AppleLink: FISCH.P

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Strategic Investment Group

General Information

October 1, 1988

Are You a Candidate for Apple Funding?

If you are interested in seeking funding from Apple's "venture group," officially called the Strategic Investment Group (SIG), or would like information on the group, this note will answer your questions. It discusses three major areas of importance to the SIG: profile of potential investments, company profile, and business plan guidelines.

Keep in mind that this group differs from a typical venture capital company in that it is focusing on companies of strategic value to Apple. However, the group does coinvest with other venture capitalists and seeks a return on investment (ROI) equal to the return on investment sought by other venture capitalists.

Potential Investments

The most likely areas for "potential investments" are as follows:

Communications hardware, software, and services

Graphics hardware and software—new solutions for specific end-user segments

 Integration of marketable software solutions with high-capacity video and compact-disk technology

Artificial intelligence tools and applications

High value-added vertical market software and turnkey solutions

"Applications generator" software

Company Profile

It is expected that the companies Apple invests in will exhibit the following characteristics:

Excellent management team

• Competitively defensible business, through either a proprietary technology or marketing strength that is not easily duplicated

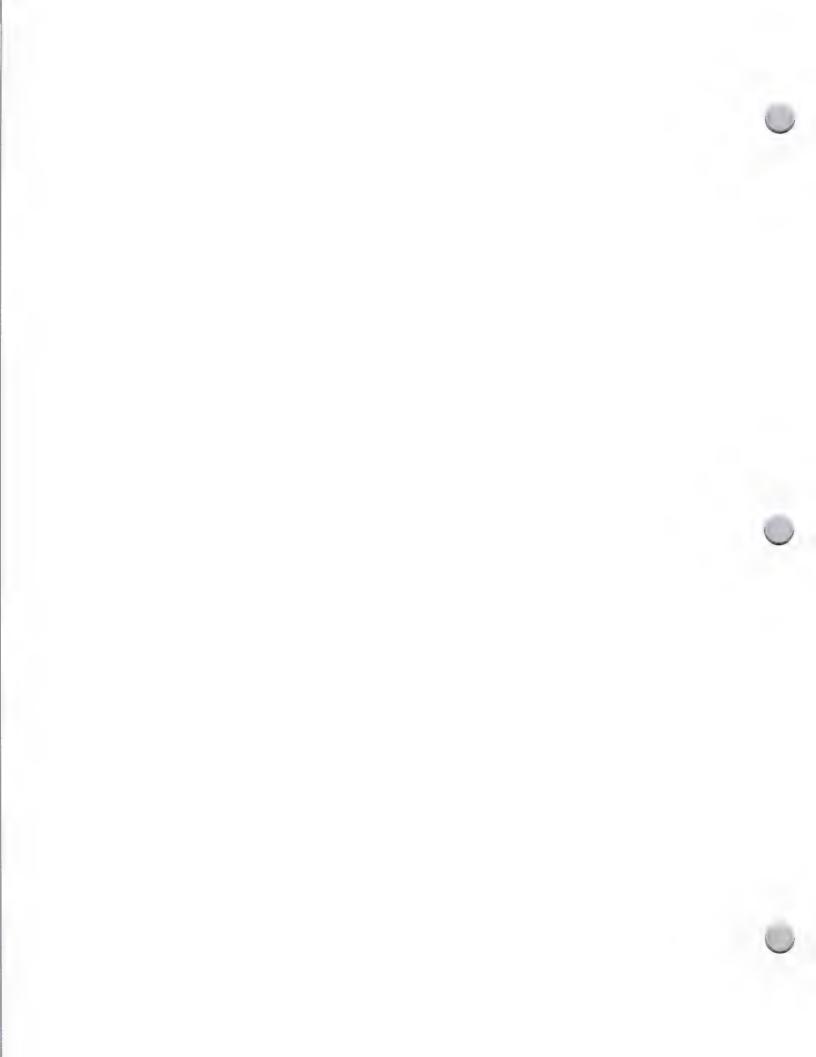
• Innovative solutions that give the company the potential to become a leader in a large, fast growing market segment

Existing product family or the potential to build a product family (because of the economies of scale in marketing and distribution)

Business Plan Guidelines

When submitting your plan, please include information on the following:

- Current management team
- Current products
- Marketing plan—how and to whom
- Current financial situation
- Estimated future operations and capital needs





Strategic Investment Group

General Information

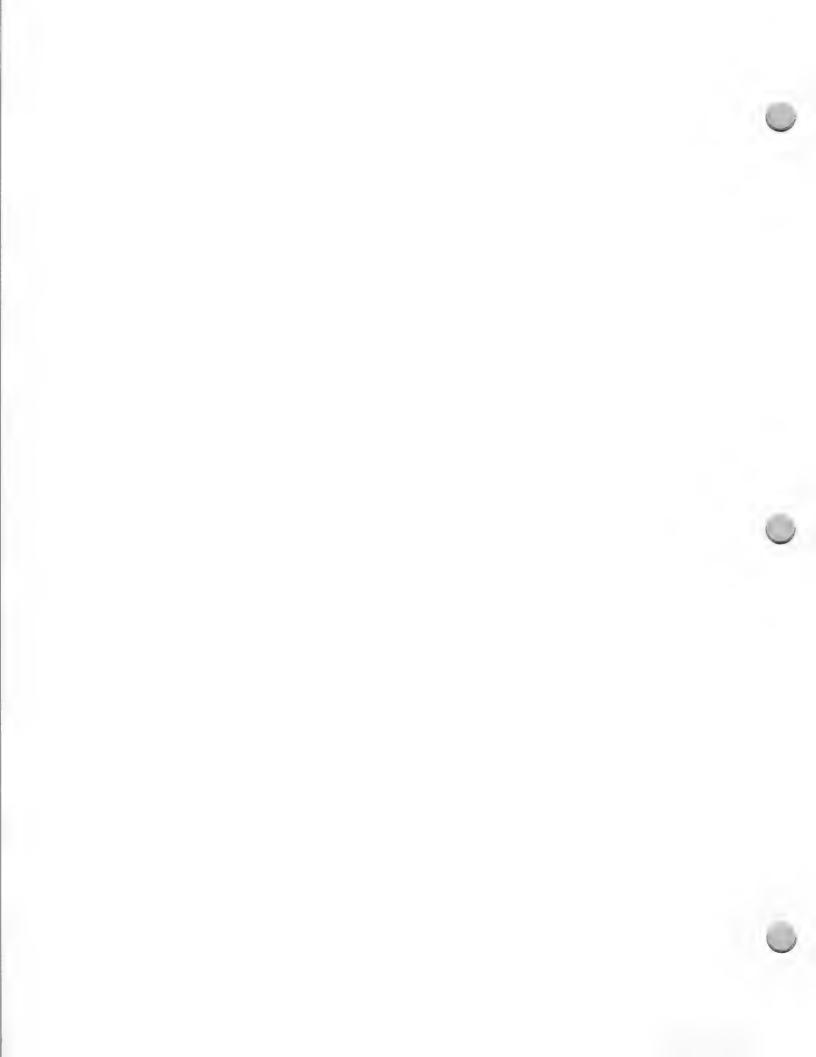
October 1, 1988

Note that the Strategic Investment Group expects to fund, at most, five companies per year. The group is investing for the long term—three to seven years—and expects to see products in the market anywhere from immediately to three years in the future.

If after reading this information, you feel that it is appropriate to make contact with this group, the most effective way to begin communicating with them is to send your business plan to the address below:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 38G Cupertino, CA 95014 Strategic Investment Group Attn.: Barry Schissman

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MCI Mail

General Information

October 1, 1988

Developer Programs and Developer Technical Support have established electronic mailboxes on MCI® Mail. Both groups have found that electronic mail is one of the best ways to communicate with developers.

Developer Programs

MCI Mail is provided to help developers with the following:

· Requests for order forms and price lists

General questions relating to the services provided by Developer Programs

Developer Programs can be reached at MCI mailbox number 280-8699. Messages sent to Developer Programs via MCI Mail are read at least once a day. Your message will either be answered immediately or be downloaded and distributed to the appropriate person within the Developer Programs group for response. The response will be sent to your MCI mailbox.

Developer Technical Support

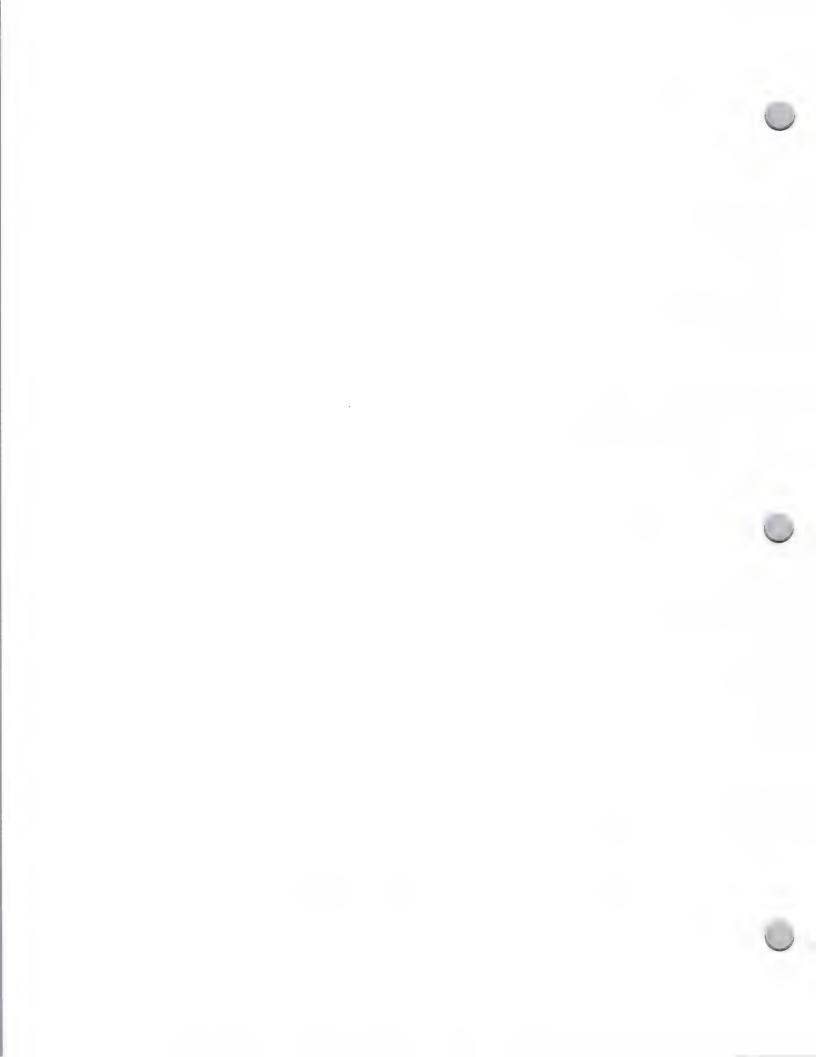
The Developer Technical Support group is here to answer technical questions that you run into during your software or hardware development. Messages sent to Developer Technical Support are read each morning at about 7:30. After all messages are read, printed, copied, and distributed, the entire Developer Technical Support group meets to discuss the best approach to each problem. Each question is then assigned to an engineer.

To ensure that you receive the best possible response, please make your questions as complete as possible. The Developer Technical Support group asks that you include the following information with each message you send:

- A general idea of what you are trying to do
- A detailed description of your problem
- The development environment you are using (including version numbers)
- Your system configuration (including version numbers)
- The possibilities you've already exhausted (and their results)
- Your name, company name, address, and phone number (in case they need to send you something or call for clarification)

You can reach Developer Technical Support at the following MCI mailbox numbers:

For Apple® II-related issues: 264-0103





MCI Mail

General Information

October 1, 1988

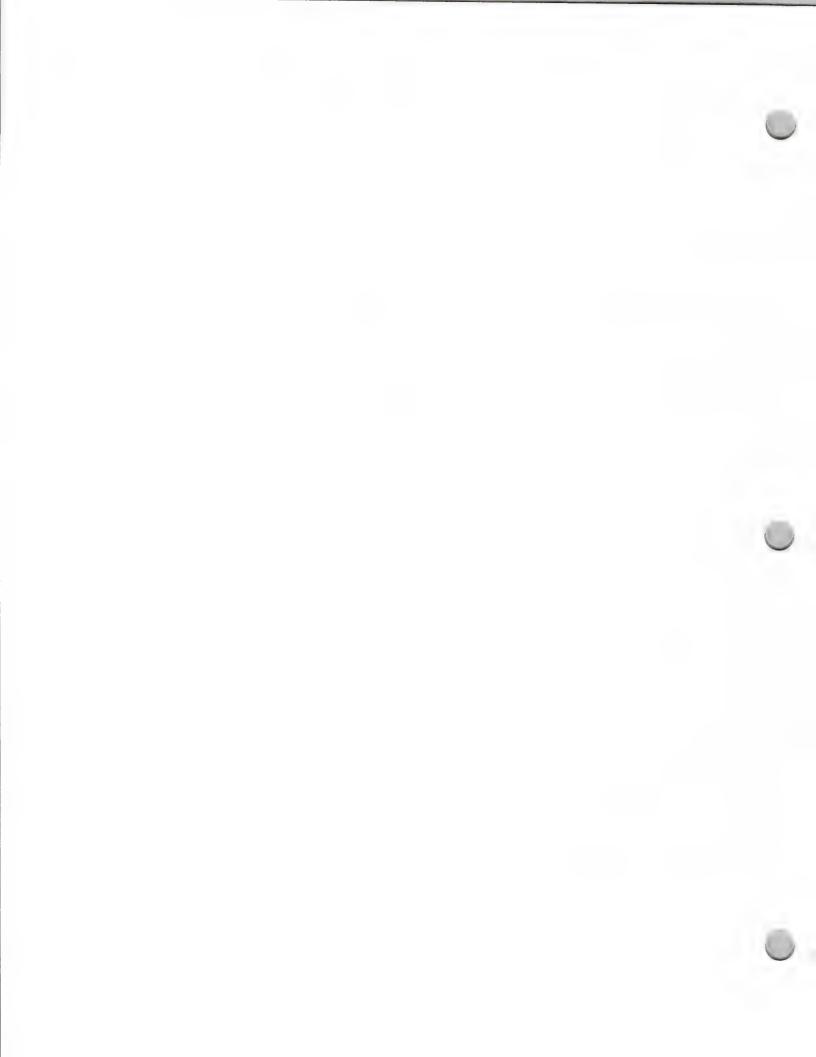
For MacintoshTM-related issues: 215-0798

How to get MCI Mail

To get an MCI account, call MCI directly at 800-444-MAIL or 800-444-6245. Each account costs \$25 a year, with a variable per-message charge depending on the length of the message (from 45 cents for a 500-character message). There is no charge for connect time.

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MCI Mail is a registered service mark of MCI Communications Corporation.





It Shipped! Program

General Information

October 1, 1988

What Is the It Shipped! Program?

The *It Shipped!* Program is a new service from Developer Programs that will benefit both developers and Apple by providing a formal communication vehicle for you to let us know about your new and revised products. We encourage you to participate in this service, which will help ensure visibility for your new products within Apple Computer.

Is It Shipping Yet?

The program is based on a simple premise: when you ship a new or revised product, we want to hear about it. There's so much activity in the developer community that it has become impossible for us to keep in touch with each of you individually to find out when your products are shipping. We also know how difficult it can be for you to remember to tell Apple about your new and revised products (let alone the difficulty of knowing how to do so). With this in mind, we established the *It Shipped!* program as a central vehicle for receiving this information from you. You simply fill out the *It Shipped!* reply card and mail it to Developer Programs. You are provided with an *It Shipped!* reply card in two ways; it is included in the package you receive when are first accepted into the Certified Apple Developer Program. Additionally, it is mailed out in our quarterly mailings to you.

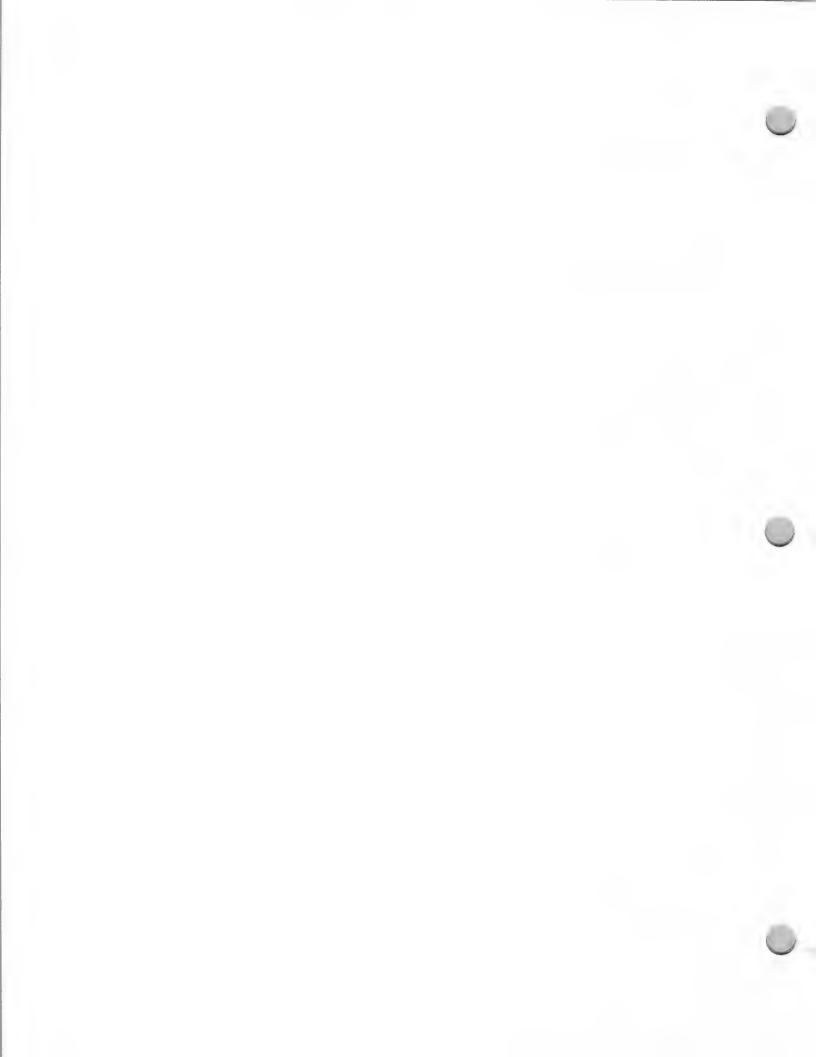
We enter all your information into the Developer Programs database. Once a month, we will publish the information and distribute it to everyone in the Developer Services group and to other Apple organizations to which the information might be useful. This includes Developer Technical Support, Developer Programs, Developer Tools, Evangelism, Third Party Marketing, and representatives in the Dealer, VAR, National Accounts, and Government channels. This information is also published in the monthly developer newsletter, Appledirect.

Product Descriptions

We are interested in *all* new and updated products. Please include information on the specific features of your products, especially those that work on our newer CPUs: the Apple IIGS, Macintosh SE, Macintosh II, Apple CD SC, or run under HyperCard or A/UX. It would also help if you include information on your target markets. If your product takes advantage of specific features of our new CPUs, we will post the information to the AppleLink information and communications network under new products/new features, where it can be accessed by dealers and other major channels. This information is also sent out quarterly in the AppleGram mailings to Apple's key sales channels.

Evaluation Copies of Product

We strongly encourage you to send us copies of your software or hardware product, either with the *It Shipped!* reply card or separately. We will place this product within several resource areas of Apple such as the Engineering Support Library, Developer Services Resource Center and the Third-Party Marketing Resource Center. The Engineering Support Library is accessed by the Research and Development staff, and is where product is drawn from for compatibility testing of Apple product. Only the most current versions are used. Having your product here does not guarantee that it will be chosen for compatibility testing. The Developer Services Resource Center is





It Shipped! Program

General Information

October 1, 1988

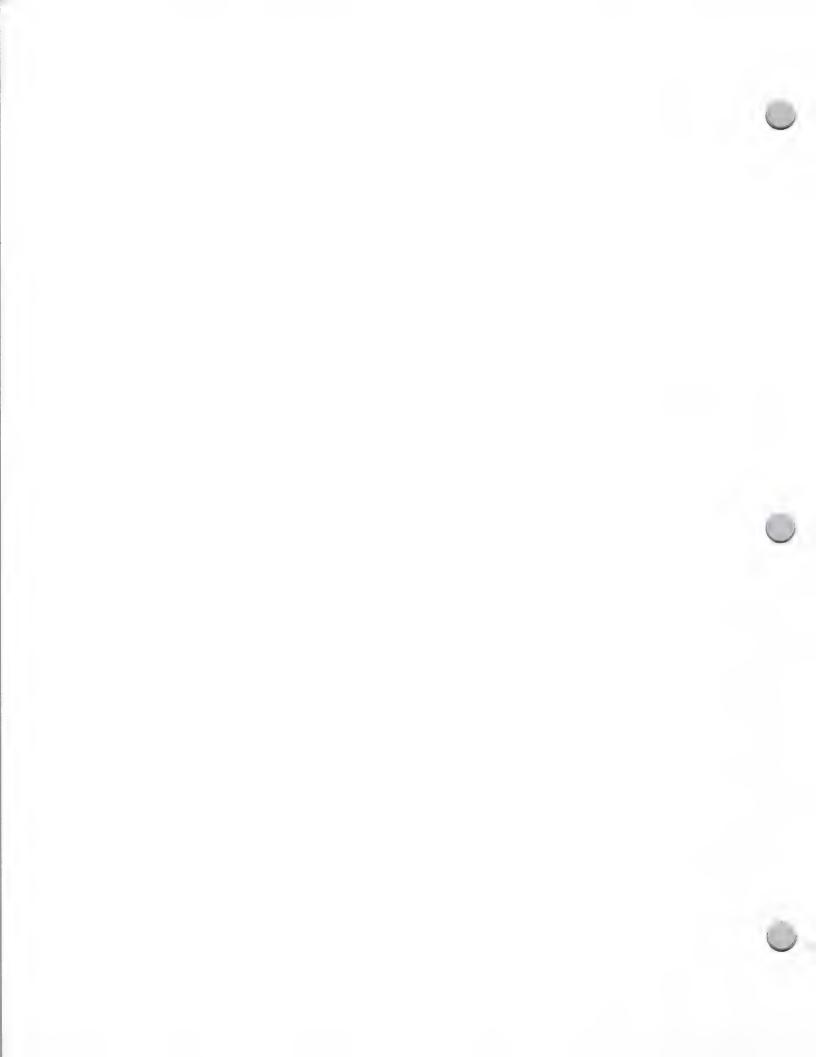
accessed by Developer Programs, Developer Technical Support and Evangelism. The Third Party Marketing Resource Center maintains current copies of product as well as tutorials and sales literature for use by Apple's sales and marketing personnel.

How to Get Involved

All you have to do is fill out the *It Shipped!* business reply card and mail it to Developer Programs. If you need additional cards, contact Developer Programs, at (408) 973-4897. If you just started shipping a product or have started shipping in the last three months, we invite you to fill out a form and send it to us at this address:

Apple Computer, Inc. 20525 Mariani Avenue, M/S 51-W Cupertino, CA 95014 Attn.: *It Shipped!*

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Software Publishers Ass'n.

General Information

October 1, 1988

What Is the Software Publishers Association?

The Software Publishers Association (SPA) is the principal trade association of the microcomputer software industry. Founded in 1984 by 25 firms, the SPA now has more than 375 members, which include the major business, consumer, and education software companies and smaller firms that have annual revenues of less than \$1 million. The SPA is committed to promoting the industry and protecting the interests of its membership.

The SPA has two membership categories: full and associate. Software firms that produce, release, develop, or license microcomputer software and are principally responsible for the marketing and sales of that software are eligible to apply for full membership status. Associate memberships are for firms that do not publish software, but that have a commitment to promoting the industry's growth. These members include software developers, vendors, consultants, market research representatives, all of the major software distributors, and hardware manufacturers.

Programs and Benefits

All members are entitled to the following programs and benefits:

- SPA Semiannual Conferences: The SPA meets twice a year, once on each coast. The conferences, which attract more than 700 attendees, offer members an opportunity to meet with industry leaders and executives. Attendees participate in informative sessions, discuss issues, and mobilize their efforts in committee meetings, which focus on the consumer, education, and business markets. For example, the SPA's most notable and ambitious project to date, Computer Learning Month, was conceived in a Education Software Committee meeting. Thousands of educators, administrators, parents, and students, as well as the United States Congress, took part in this nationwide public awareness project.
- Market Research Program: Each month, participating publishers have the opportunity to receive detailed market sales reports. Members use the SPA's monthly sales reports to track software industry trends, the relative sizes of market segments, and their own market share. According to the SPA, its reports are the most reliable source of market data available to the industry. Members that participate in this market research program are required to submit sales figures and information to the national accounting firm of Arthur Andersen in Washington, D.C., which charts the course of the software industry. This information is available only to the SPA members who share their confidential sales figures and information. Individual company sales data is not disclosed.
- Salary Survey: The SPA conducts the software industry's most extensive salary survey. The annual survey focuses on human resource practices, and short and long term compensation for 30 positions common to companies in our industry. Participants receive the survey results free of charge.
- CEO Round Table: Chief Executive Officers of member companies meet in small groups with other CEOs of non-competitive firms to discuss informally a wide range of business problems including marketing, personnel, and breaking into the distribution channel.





Software Publishers Ass'n.

General Information

October 1, 1988

- Contracts Reference Disk and Manual: The Contracts Reference Disk and Manual is a compendium of legal contracts used in the software industry. Although it is not intended to replace an attorney, it is an indispensable tool that includes everything from nondisclosure agreements to site-licensing agreements. It costs \$300 for nonmembers, but is free to members.
- Lobbying: The SPA provides industry representation before the U.S. Congress and the executive branch of government and keeps members up-to-date on events in Washington, D.C., that affect them. The fight against software piracy is among its top priorities. The SPA is the industry's primary defense against software copyright violators both in the United States and abroad. Litigation and an ongoing advertising campaign are ways in which the SPA strives to protect the copyrights of its members.
- SPA Newsletter and Complimentary Subscriptions: Members receive the SPANEWS on a monthly basis. This newsletter updates members on SPA activities, and members also use it as a forum for exchanging viewpoints and ideas.

In addition, members receive complimentary subscriptions to industry publications, such as Jeffrey Tarter's Soft-Letter, Software Industry Bulletin, Broadview Associates' Perspectives, and Data Analysis Group's Computer Industry Forecasts.

Award Programs: The SPA Excellence in Software Awards recognize products that
have achieved a high level of excellence, as determined by the SPA members. They are the
software industry's version of the movie industry's Oscars. Members vote to award prizes
in 25 categories, including best software program, best sound, best business productivity
program, best graphics, and best general education program. The winners receive national
publicity.

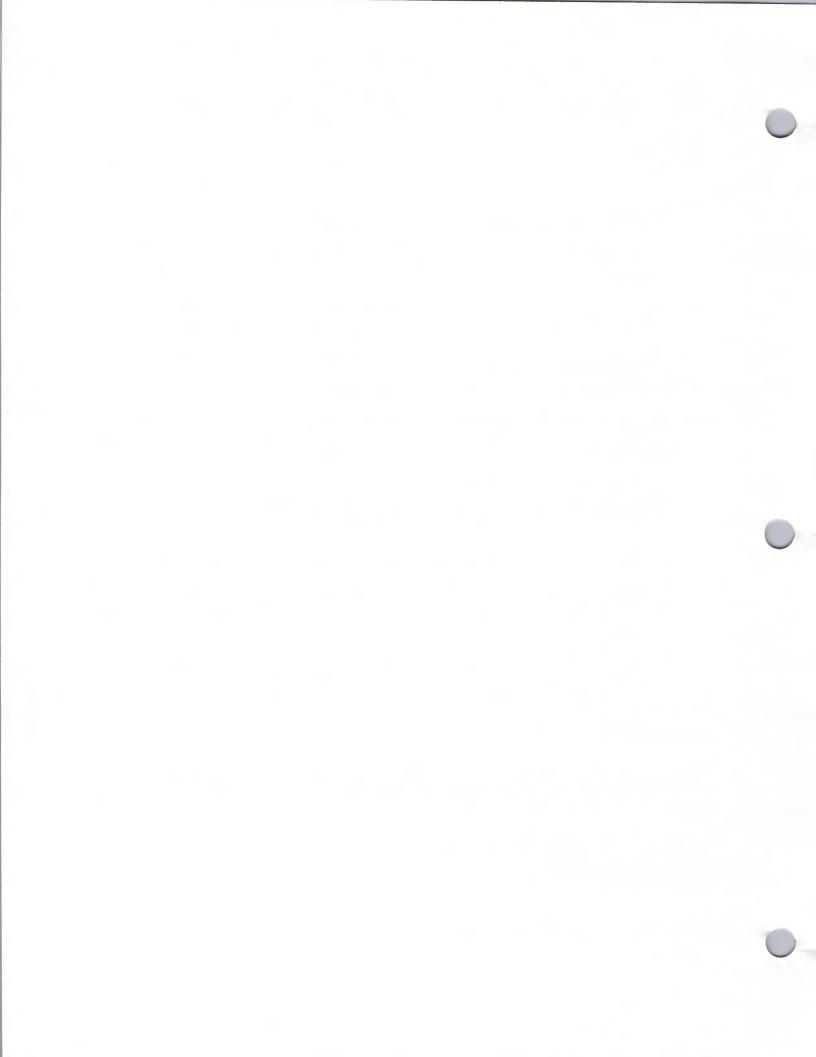
The Sales Certification Program awards Diamond, Platinum, Gold, and Silver certifications to software that reaches outstanding sales marks. Gelfand, Renner & Feldman, the accounting firm that manages the Recording Industry of America's certifications, conducts the sales audits for the SPA.

Membership Details

Members' dues are based on annual sales revenues. The SPA will keep confidential the amount of each member's dues. If you would like to join the Software Publishers Association, or have questions, please contact the organization:

Software Publishers Association 1101 Connecticut Avenue, NW, Suite 901 Washington, D.C. 20036 (202) 452-1600

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Macintosh Vendors Assn.

General Information

October 1, 1988

The Macintosh Vendors Association is an independent organization for Macintosh software and hardware marketeers. It was formed in 1987 to facilitate the sharing of information and resources, and to promote the common business interests of companies marketing products for the Apple Macintosh computer. Companies join together to exchange information and knowledge about various topics such as export regulations, dealing with distributors, software packaging, and site licensing. Currently there are approximately 100 members.

The MVA has two membership categories: Active and Associate members. Companies that are currently shipping a product or will be shipping a product within a six month period for the Macintosh are Active members. Associate members are firms that do not publish software, but are interested in the goal and purpose of the MVA. Associate members are non-voting members. Members include developers who market their own products and publishers who market products developed by others.

Programs and Benefits

Both active members and associate members are entitled to the following programs and benefits:

MVA Semiannual meetings - The MVA holds its semi-annual meetings during the MacWorld Expo at both Boston and San Francisco. These are open forum meetings that are controlled by the members. Attendees participate in informative discussions on hot topics that are of importance to its members.

MVA Forum - The MVA electronic bulletin board is a communication vehicle to promote an exchange of ideas and discussions of issues that are important to its members. The restricted-access bulletin board has been established where all members can post, read, and respond to messages through CompuServe. There is also a data library where permanent information can be archived.

MVA Newsletter - Members receive the MVA Newsletter on a monthly basis. The newsletter is the primary forum for the exchange of ideas within the Macintosh Vendors Association. It includes a feature story describing the history of one of its members. The newsletter is used to let others in the industry hear what association members have to say about important issues and give them exposure through their ideas and feature stories. It also goes to press people that have been identified as having interest in the Macintosh market place.

Membership Details

The annual membership fee for MVA is \$100. If you would like to join the Macintosh Vendors Association, or have questions, please contact the organization:

Macintosh Vendors Association CE Software, Attn. Paul Miller 1854 Fuller Road, P.O. Box 65580 West Des Moines, IA 50265 (515) 224-1995

